The American Artisan

THE HARDWARE RECORD

Volume 42.—No. 13. CHICAGO, SEPTEMBER 28, 1901. $2.00 Per Year.

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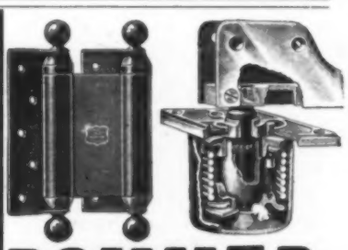

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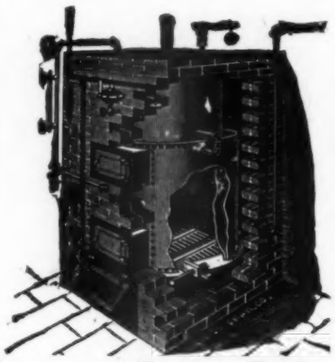

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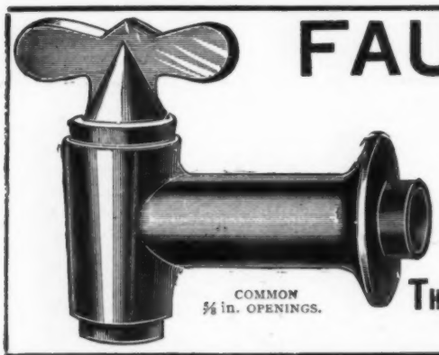

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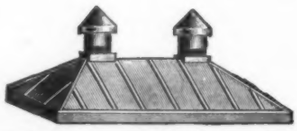

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The Kelsey method of warming the air is the best method.

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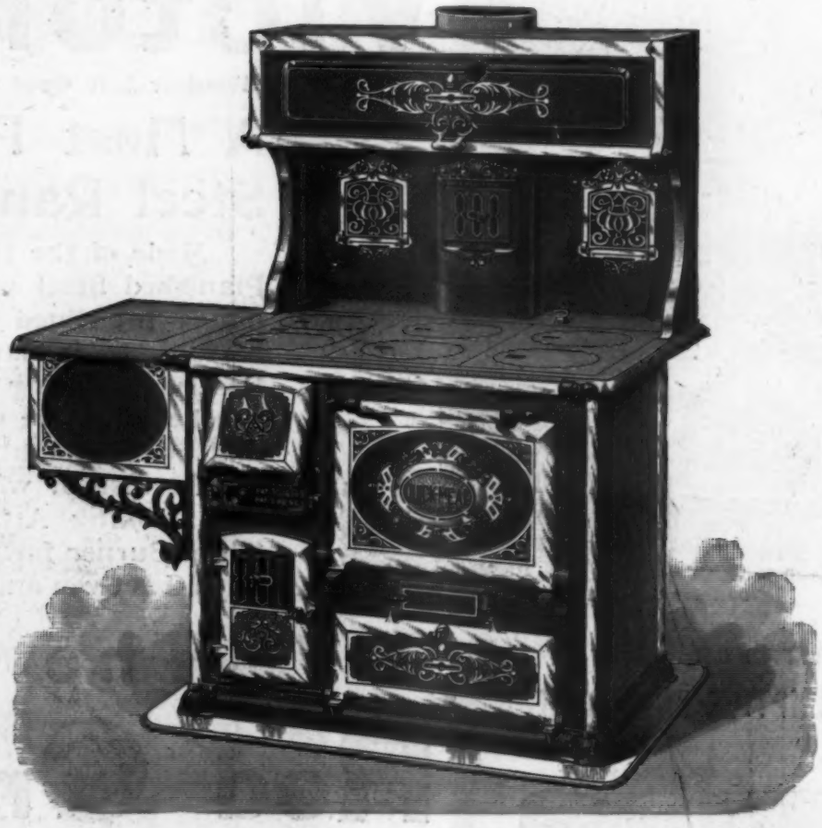

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For Hard or Soft Coal or Wood.

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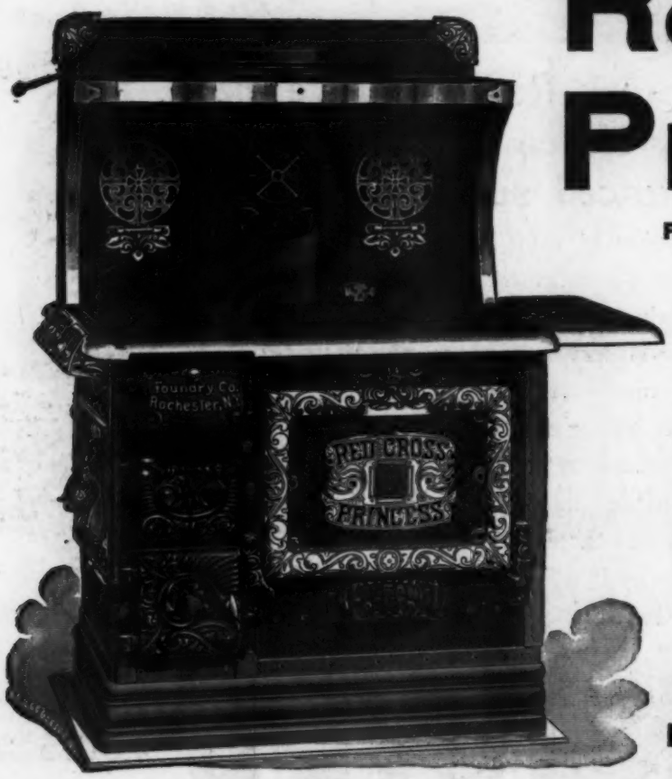

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The extreme bottom or cast iron base section is an exceptionally desirable feature through being loose and detached from the range until set up in the kitchen. A convenient dimension is secured which permits its passage through comparatively narrow doors.

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Contains Many Original Features. Ornamental in Design. Has the Front Draw Out Grate, which is included with the more Modern of our Ranges.

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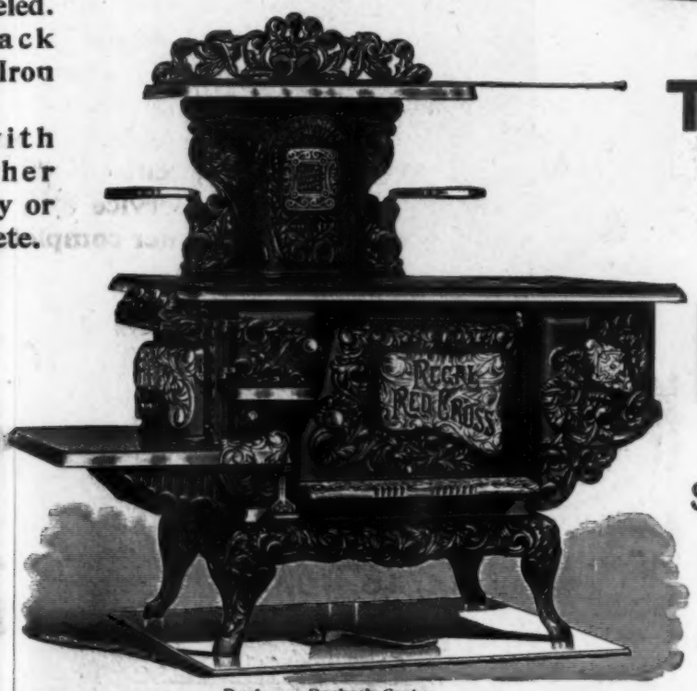

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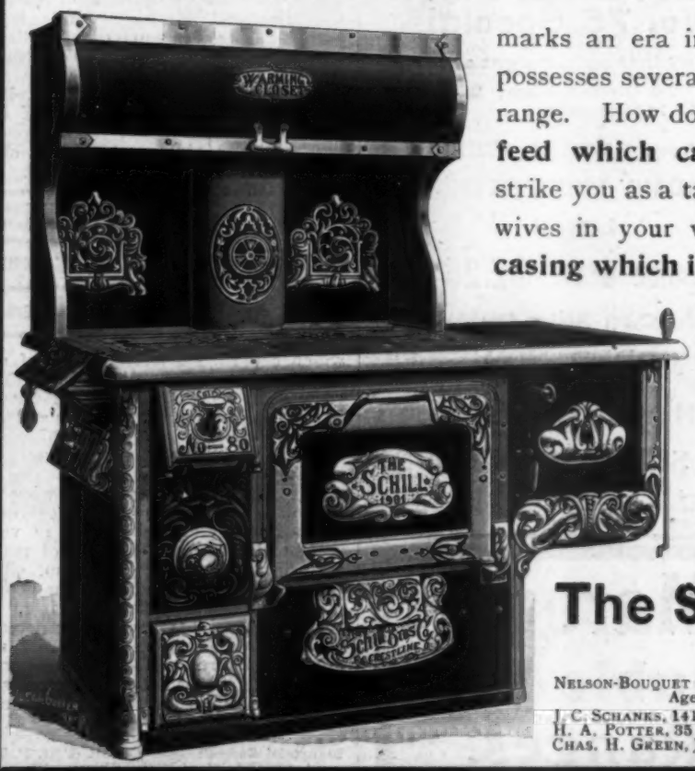

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Body: 24 inches high; 24 inches deep; 17 inches wide.

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SOUTH DAKOTA	IOWA	WISCONSIN
Express Passenger Trains, Fast Freight Trains Throughout.	MISSOURI	ILLINOIS

which comprise a territory full of natural resources and advantages. This railway is geographically well located in relation to the great markets and distributing centers. Beyond its lines is a vast and rapidly developing territory extending to the Pacific Coast.

The Company gives unremitting attention to the development of local traffic along its lines and, with this in view, seeks to increase the number of manufacturing plants on its system, either through their creation by local enterprise or the influx of manufacturers from the east. It has all its territory districted in relation to resources, adaptability and advantages for manufacturing. Specific information furnished manufacturers in regard to suitable locations. Address,

LUIS JACKSON,
Industrial Commissioner C., M. & St. P. R'y.
660 Old Colony Bldg., Chicago, Ill.

CUT THIS OUT.

TO THE PUBLISHERS

THE AMERICAN ARTISAN,

69 Dearborn St., Chicago.

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars, for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address.....

Town.....

State.....

Gilt Edge Warm Air AND Combination Heaters

are leaders embodying points of furnace excellence possessed by no other furnaces. A large variety of sizes and styles, each especially adapted for a certain class of fuel. We are manufacturers of a complete line of warm air registers, safety pipe and tin galvanized iron furnace fittings.

R. J. Schwab & Sons Co.,

MILWAUKEE, WIS.

Mr. Live Dealer

This advertisement for

MONARCH

Malleable Iron and Steel Ranges is now appearing in over sixty of the leading Magazines and Family Papers of the United States. The combined circulation each month is over thirty million copies.

This insures the attention of more readers in your community than an advertisement in all your local papers combined. It further means that thousands of **MONARCH** Catalogues are being placed in the hands of persons desiring to purchase a first-class Steel Range and who will read them from beginning to end. Some of these are rightfully your customers and with **MONARCH** Ranges in stock you can easily have the sale.

MONARCH Ranges are made of Steel and Malleable Iron. They have no Equal.

Send at once for catalogue and special introductory offer to live dealers, including our "follow-up" plan, which is endorsed as the greatest help to a dealer in selling steel ranges ever offered by any manufacturer.

Malleable Iron Range Co. Beaver Dam, Wis.

Ohio and U. S. Wrought Steel Ranges

We are pioneers in steel range business; old in experience yet adopt modern up-to-date methods. Write for our catalog.

Tinnerman Steel Range Co.,

CLEVELAND, O.

The Star Extension Stove Back

Adjustable in width from 4½ to 7 inches; in length from 14 to 22 inches.

The corrugations prevent ashes from lodgment on the back. It can be easily fitted into any stove.

The Schreiber & Conchar Mfg. Co.,

DUBUQUE, IA.

"It is true that advertising will not put merit into poor merchandise, but good merchandise often becomes poor for the want of good advertising."

—Some Essential Oils for Advertising.

100 Tinners' Patterns.

THE AMERICAN ARTISAN FULL SIZE PATTERNS Printed on Manila Paper from which they are readily transferred to Heavy Sheets and cut out ready for use.

The Full Set of 100 Patterns, Price, sent postpaid for

$1.00.

ADDRESS

DANIEL STERN,

Publisher,

69 Dearborn St., CHICAGO.

THE STEEL STRIKE

Has sent the price of material soaring. We have a large stock of Furnace Pipe, Fittings, Registers, Asbestos Cement, etc. Our prices will even **wake up**

A WIDE AWAKE MAN

Why not drop us a postal. We'll do the rest.

THE WIRETON TIME REGULATOR.

A Marvelous Seller.
Will automatically turn on the draft of any furnace, steam, or hot water boiler.

THE HOFFMAN STEEL FURNACE.

The highest type of an exclusively hard coal furnace.

THE AUER SIDE WALL REGISTER.

No Cut Carpets.
A comfort as well as an ornament. No dirt, no dust, easily cleaned.

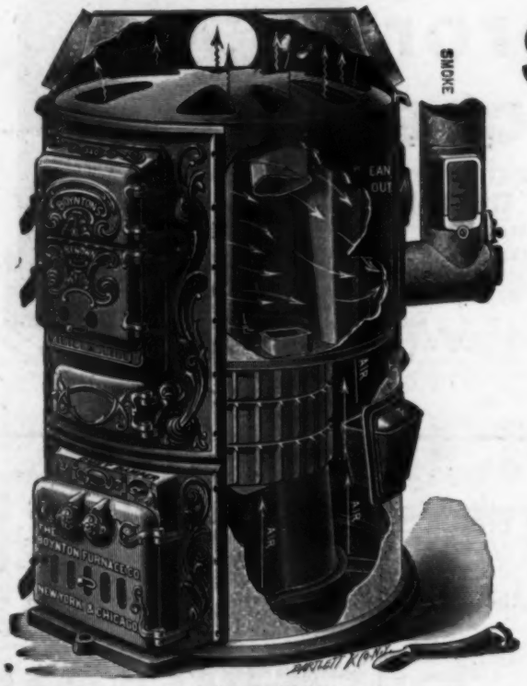
Our furnaces and specialties are great levers for pushing business your way. Exclusive agencies given.

WIRETON HEATING CO., MAIN OFFICE AND WORKS Blue Island, Ill.

CHICAGO OFFICE, 40 DEARBORN ST.

The making of heating apparatus—

Hot Water Heaters, Steam Heaters and Furnaces,



is our Specialty. In over fifty years of experience we have met with about every phase of the heating problem. The manufacture of economical and durable heating apparatus has been our constant aim, and our success has been fully demonstrated by our long continuance in this line.

REMEMBER, efficiency and durability are the sure tests of cheapness.

Catalogues, Price Lists and Discounts cheerfully furnished the trade.

The Boynton Furnace Co.,

New York and Chicago.

You Can Not Buy

A Furnace Superior to the

MUELLER

Because It Is Not Made.

Our Heaters Are Made In All Sizes and For All Kinds of Fuel.

EVERYTHING IN THE HEATING LINE.

Write for Catalogue and Prices.

Established 1857.

L. J. Mueller Furnace Co., 191 Reed St., Milwaukee, Wis.

BRAND STOVE CO.

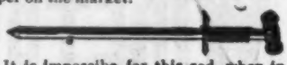
We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogs.

MILWAUKEE, WIS.

The YANKEE Hot Air DAMPER (Improved) All Steel.

Above All, Cheapness—a dealer cannot possibly make dampers as cheaply as we sell the Yankee. Easily put in and taken out of pipes. Stiffest, quickest working and neatest damper on the market.

ROD POINTS: Has wood enameled handle. Wood handle cannot come off. Washer and spring cannot fall off the rod. Same size of holes are punched on each side of pipe. Rod is made of ½-inch cold-rolled steel and slips into damper very smoothly. **Sample sent to any dealer without charge.**



It is impossible for this rod, when in position, to move either way.

The S. M. HOWES CO., Manufacturers, 40-46 Union St., Boston, Mass.

NEW YORK: A. L. Canfield, 248-286 Pearl St. CHICAGO: Excelsior Steel Furnace Co.

Sizes: 6, 7, 8, 8½, 9, 10, 10½, 11, 12, 12½, 14, and 15.

Emperor Furnaces

For Wood

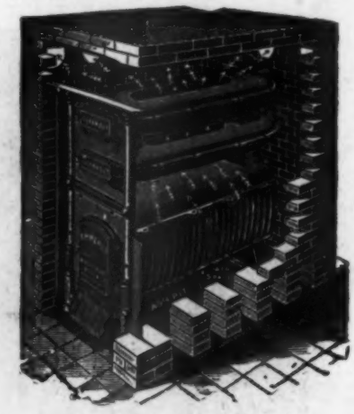
Simple. Safe. Durable.

The Best and Cheapest Line of Wood Furnaces.

Furnished for Either Brick or Galvanized Iron Casing. Send for Catalogue.

Bergstrom Bros. Co.

Neenah, Wis.



Wisconsin Furnaces

stand for the best in furnace construction. They have features which make them trade winners.

Get our prices and printed matter.

Phipps Furnace Co.,

135 ONEIDA ST., MILWAUKEE, WIS.

DON'T READ THIS

Unless you are interested in down-to-the-minute advertising. Have had over 15 years' practical advertising experience with some of Chicago's most successful Manufacturers, Jobbers and Retailers. Am at present engaged with a very large advertiser, but have time to spare and will do a limited amount of work for any one who desires first-class ADVERTISING SERVICE at very reasonable rates. Write for further Particulars.

FRANK. E. RUBOVITS,

233 Fifth Avenue, - - Chicago, Ill.

STAR STOVES AND RANGES
ENTERPRISE STOVE CO. VINCENNES, IND.
GUARANTEED

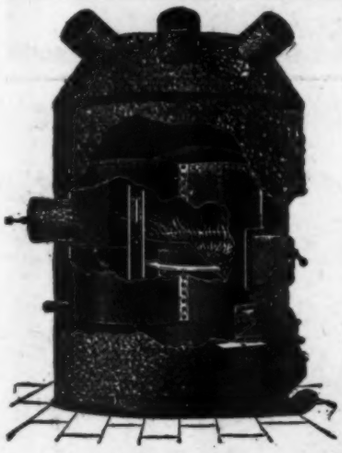
CATALOGUE SHOWING

Gas Ranges — Cast Cooks
Steel Ranges — Cast and
Cast Ranges — Steel Heaters
Steel Cooks — Hot Plates

WILL BE FURNISHED FOR THE ASKING BY

Enterprise Stove Co.

VINCENNES, IND.



Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING **Furnace.**

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

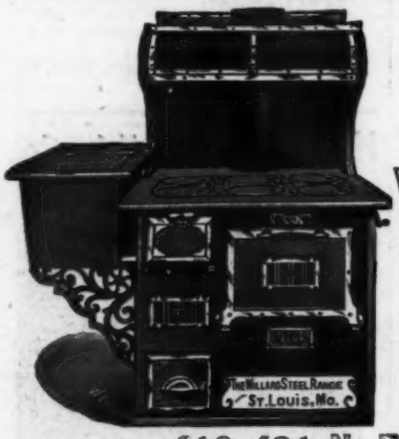
Manufactured by

Meyer Furnace Co.

Send for Catalogue. **PEORIA, ILL.**

Is Absolu e y Safe.

Handy Pipe.



NO EXTRA

charge is made to purchasers of our ranges for the name or past reputation. These goods sell on their merits, and the dealer who secures an agency for the

WILLARD STEEL RANGE

has a range that he can sell at a price that places it within the reach of all classes.

WM. G. WILLARD, MFR.,

619-621 N. FOURTH ST. ST. LOUIS, MO.

JUDGMENT in business matters ought to make it plain to you that it is just as important to you to use good Asbestos Furnace Cement and Stove Putty in the manufacture of your furnaces as it is to use good iron

Colebrook's Asbestos Furnace Cement and Stove Putty is the best that can be manufactured. We have furnished the largest manufacturers of furnaces and stoves in the country, and are still doing it. We are ready to furnish you. Why not? Send us your next order. Put up in all size removable cover cans, tubs, barrels and half-barrels.

Manufactured only by

W. H. COLEBROOK, SONS & CO.,

SYRACUSE, N. Y., U. S. A.

Largest Makers of Asbestos Furnace Cement in the World.

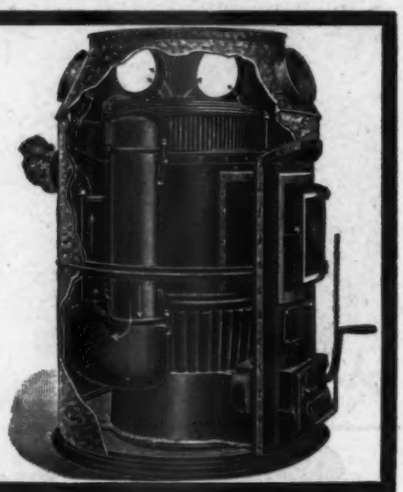
CHAS. SMITH CO.
Western Selling Agents
122 Lake St., Chicago, Ill.

15

That's the number of distinct types of **FLORAL CITY** warm air and combination heaters for any class of work or any kind of fuel.

Monroe Foundry & Furnace Co.,

MONROE, MICH.



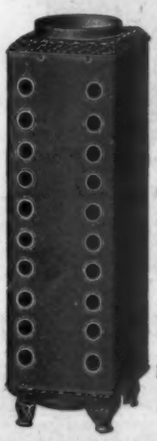
The New Hero Furnace.....

Is especially adapted for a combination of hot air and hot water. All Cast Iron, for Low Basements, Coal or Wood. Made in three sizes for large residences and public buildings.

The Chas. Smith Co.,

122 Lake St., CHICAGO.

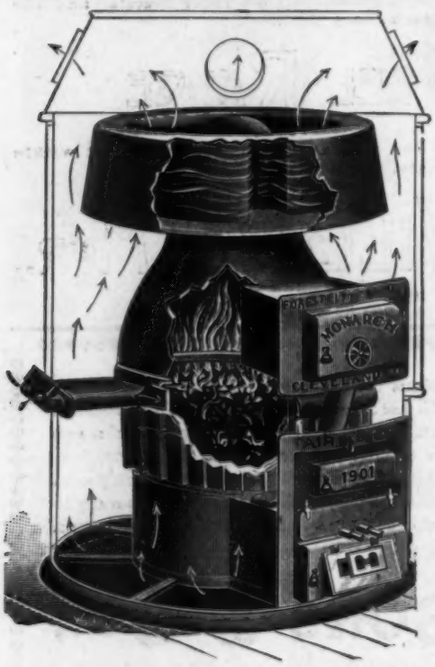
Independent Square Stove Pipe Radiators.



The Kind that do not clog with soft coal.

Independent Register Co.

158 Champlain St., Cleveland, Ohio.



Monarch Furnace

ALL CAST IRON WITH RETURN TOP FLUE.

No "steel" or sheet iron parts to rust out or warp, or JOINTS of a combination of CAST IRON and SHEET METAL to OPEN and allow the ESCAPE OF GAS, SMOKE OR DUST INTO THE AIR CHAMBER.

Do not take our word for it; order a sample furnace, set it up in your shop or store and judge for yourself. If it is not as represented send it back at our expense. As we have almost no expenses in the way of traveling or advertising, we are able to sell the furnaces at a light profit, depending on merit and price to get trade and hold it.

MADE BY

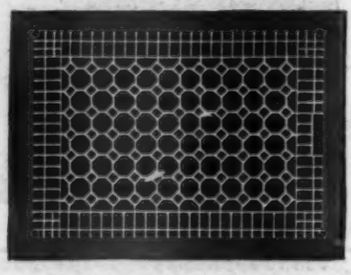
The Forest City Foundry and Manuf'g Co.,

Cleveland, Ohio.

Henry & Scheible Co.

SUCCESSORS TO T. E. HENRY.

10 Long St. CLEVELAND, O.



ALL SIZES—ALL STYLES OF FINISH. PROMPT SHIPMENTS

Quality and finish unexcelled.

SEND FOR CATALOGUE.

RUFUS SLOTHOWER, Shullsburg, Wis., writes: "I consider your manuals of inestimable value to the craft and no tinner can afford to be without The American Artisan."

L. A. Wilkin, Chrisman, Ill., writes: "Please discontinue my ad. in your paper. With the **one insertion** I have a **half a hundred inquiries.**"

Superior Furnaces

Insure the greatest amount of heat for the fuel consumed. They are adapted to all climates and fuels and embrace in their construction the latest and most improved features known to modern furnace building.

New Superior Heater with Cast Radiator.

Powerful Heaters.

Economical in Fuel.

Easily Operated.

Absolutely Free from Dust, Gas and Smoke.

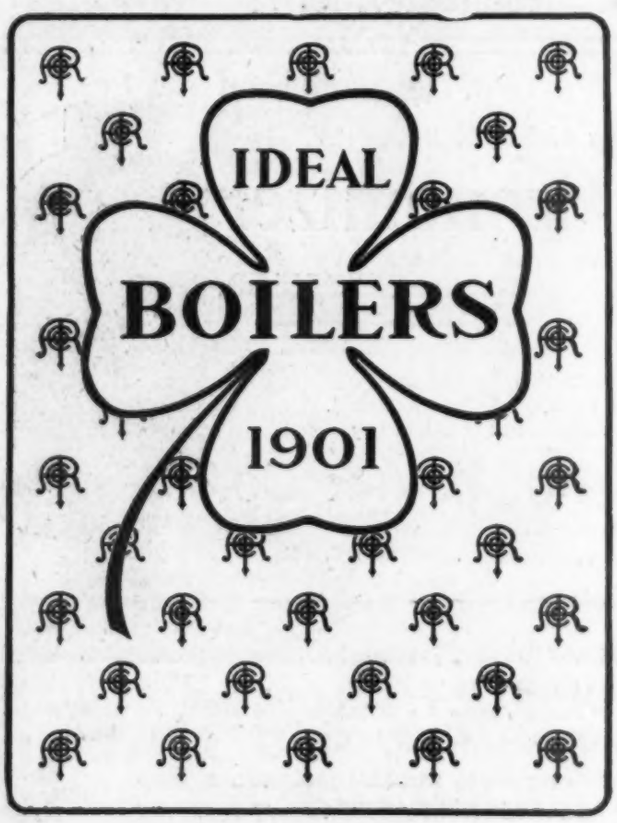
Write for Catalogue and Prices.

New Superior Warm Air Furnace.

Manufacturers.

Utica Heater Co. Utica, N.Y.

CHICAGO HEATER & SUPPLY CO., - - 54 DEARBORN ST., CHICAGO, ILL.



OUR NEW

Boiler Catalogue

NOW READY.

A postal card request will secure a copy...

AMERICAN RADIATOR COMPANY

Lake and Dearborn Streets,

CHICAGO.

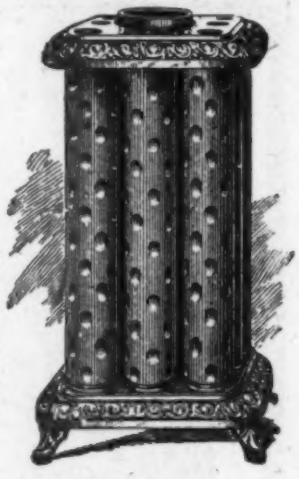
New York, Philadelphia, Buffalo, St. Louis, Minneapolis and Denver.

We are sending money to you. Our advertising will bring inquires to your store and every inquirer means a profitable customer.

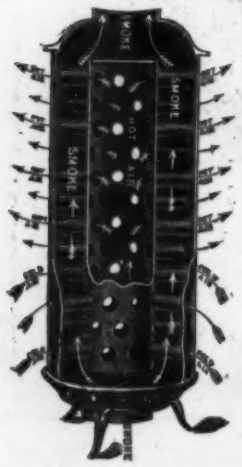
Are you prepared to show the

New Era Radiators

they will ask for? Or are you going to let this business go to your competitor? Send for price list—we can satisfy you that we have a money making proposition for you.



WILMOT CASTLE & CO., - - 77 Elm St., Rochester, N. Y.

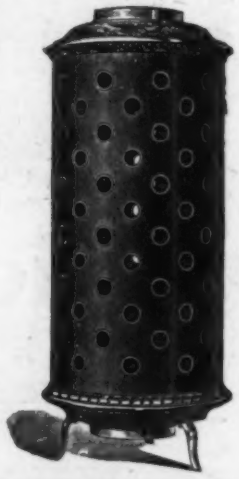


COUNT THE TUBES

IN THE

Rochester Radiator

and you will comprehend the great radiating surface directly over the hot current where one square inch is better than six at the side.



Rochester Radiator Co.,

120 Furnace St., Rochester, N. Y.

Registers and Ventilators.

A Full Line, Unique Designs

Quality and finish unexcelled. All styles of finish, from Japanned to Gold Plated.

Send for Catalogue.

The Philadelphia Hardware and Malleable Iron Works

Philadelphia, Pa.

Prevent Waste of Heat and Fuel

By Using BURTON'S

Fuel Economizer

Pointers for the Trade:

WELL ADVERTISED.
A QUICK SELLER.
LARGE PROFITS
TO DEALERS.

WE PROTECT DEALERS.
Write for Prices, Testimonials and Catalogue J.
Manufactured and Distributed by

W. J. BURTON & CO.

The Quick Shippers,
164-166 West Larned St., DETROIT, MICH.

W. J. BINKLEY, BELLEVILLE, KAN.

WRITES:

"I gain much valuable information from THE AMERICAN ARTISAN and would not think of running a tinshop without it."

JEWEL STOVES AND RANGES..

JEWEL STOVES AND RANGES
DETROIT STOVE WORKS
LARGEST STOVE PLANT IN THE WORLD

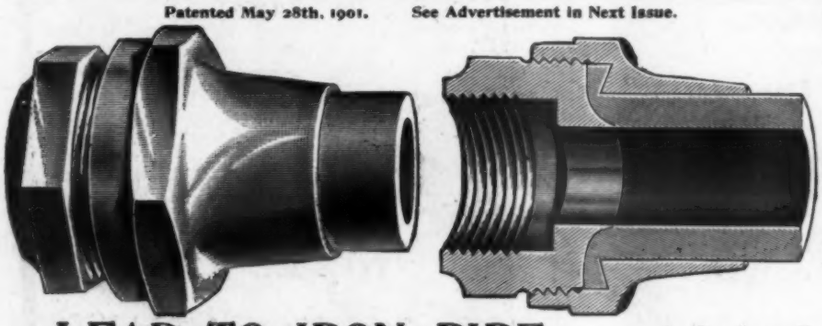
A Complete, Well Advertised Line;
Low Prices and Good Workmanship.

Please Write for Catalogue.

DETROIT STOVE WORKS.

Detroit - Chicago.

Patented May 28th, 1901. See Advertisement in Next Issue.



Novelty Couplings

Lead to Lead and Lead to Iron or Copper.

LEAD TO IRON PIPE. A Perfect Substitute for Wiped Joints.

Water Back, Faucet, Boiler Couplings, Etc.

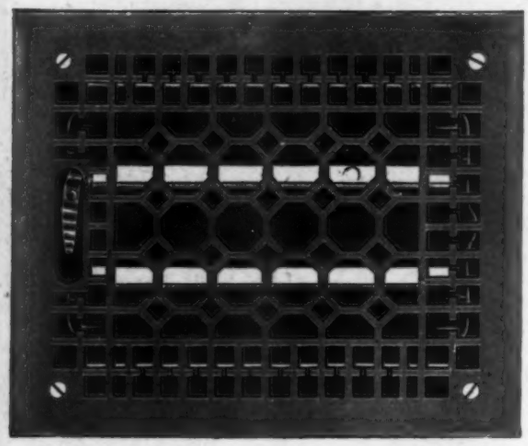
SEND FOR COMPLETE CATALOGUE

The New Haven Novelty Machine Co., New Haven, Conn., U.S.A.

OUR LINE OF

REGISTERS

WILL INTEREST THE TRADE.



Write Us For Prices. They Will Certainly Interest You.

The Fanner Mfg. Co.

CLEVELAND, O.

IF

people only knew a little something about

Range Peddlers and Their Methods of Doing Business,

dealers would have but little to fear from the guerilla competition of these gentry.

For the benefit of the trade we have gotten up a neat little 8-page pamphlet, with the second and eighth pages blank for advertisements.

Steel Range Manufacturers

desiring some of these pamphlets for distribution among their customers can secure them at the following low prices:

In 100-lots, at $1.00
In 500-lots, at 2.50
In 1,000-lots, at 4.50

ADDRESS,

DANIEL STERN,
69 Dearborn St.,
CHICAGO.

ROUND OAK
Standard of America

Unsolicited Letter—Published by Permission.

Salt Lake City, Utah,
June 4, '01.

Heat and Ventilating Department

Estate of P. D. Beckwith,
Dowagiac, Michigan

Gentlemen:

We have just sold eight *Round Oak* Furnaces.

This makes eleven this week, which we think is pretty good work, considering the fact that the *Round Oak* is not a cheap furnace.

When we put in a *Round Oak* furnace, it is the same as selling a *Round Oak* stove: All the work we have is to make the sale, after that the owner does the rest.

We will forward specifications for ANOTHER CARLOAD of *Round Oak* furnaces in a few days.

Yours very truly,

Geo. H. Scott-Strevell Hardware Co.

39

CURTIS CANDY CHICAGO 1901

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

Terms of Subscription in the United States, their Possessions, and Canada, (invariably in advance): One Year, Postage Paid, $2.00.
In Foreign Countries, Except Canada, One Year, Postage Paid, $4.00.

Address all Letters, communications and remittances to

DANIEL STERN, President American Artisan Press,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

This Paper is a Member of the Chicago Trade Press Association.

CHICAGO, SEPT. 28 1901.

THE Business Men's Association of Michigan are advocating some important legal reforms in which all merchants in that state are interested. Their committee on legislation, at their last annual meeting, held in July, recommended, among other needed enactments, that husband and wife should be jointly and severally liable for the necessities of the family, and the joint and separate estate and property of each should be liable for such debts.

OWING to the slack demand a great amount of unsold goods has accumulated in the foundries in the Rhenish Westphalian district, Germany. The confidence which was felt in a speedy improvement of the market has diminished. The failure of the Leipziger and other Saxon banks has also had a bad effect on the situation, as no orders come from Saxony on account of the depression caused in commercial circles by the financial crisis. Indisposition to buy has again become universal in Germany, and orders are only given when absolutely necessary. The great foundries are thus compelled to make more energetic efforts than usual to get work, and this tends to lower prices. At the same time, no more orders than hitherto are procured from abroad. The market will not recover from the prevailing depression until the vast quantities of goods which were produced when better prices prevailed have been disposed of.

AMERICAN locomotives continue popular on the railways of India, where they are in competition with English engines. Col. Constable, the manager of one of the great railway lines of India, recently visited the United States to study the railway system, and the Treasury Bureau of Statistics has just received a summarization of his report submitted to the Indian government, and, through it, laid before the British Board of Trade. Colonel Constable states in his memorandum that no doubt the American engine burns more fuel and wears out sooner than the English locomotive, and the former is unquestionably a dirty looking machine, but Americans do not expect their engines to last more than 15 years, by which time they are ready to put them on the scrap heap and adopt a different design and a more efficient article, and it must be remembered that coal is exceedingly cheap in America. Colonel Constable also states that their great hauling capacity makes up for any defects in their details, and that in his opinion weak and out-of-date engines are not discarded often enough in India.

PELEG HOWLAND, of H. S. Howland Sons & Co., Toronto, Canada, president of the Canadian Wholesale Hardware Association, in his recent address before that body, said: "We should consider, too, the advisability of encouraging throughout the country the formation of retail hardware associations, with a view to obtaining their co-operation in overcoming those inequalities which are so largely the cause of demoralization of prices." This view is in strict accordance with the most progressive ideas of trade unity. The better element in the jobbing world realizes its dependence in the retailers and the need of co-operation, but the question of ways and means is one that arises constantly. One reason why retailers should organize is to put themselves in a position where their friends can help them. The jobbing association desirous of obtaining the co-operation of retailers in the states of Ohio or Kentucky in some matter of trade interest can deal with the officials of the state retail association. But how can they reach the West Virginia hardware men in a scheme of mutual helpfulness, the unorganized condition of the retailers of that commonwealth making negotiation a very complicated affair?

Imports of Tropical Products.

Imports of tropical and sub-tropical products into the United States continue to increase, as shown by some figures just prepared by the Treasury Bureau of Statistics. The demand of the temperate zones upon the tropics for articles of daily use as foodstuffs or for use in manufacturing seems to increase with each year and with the increase of facilities for interchange betewen the tropics and the temperate zones. Coffee, sugar, india rubber, fibers, tobacco, fruits and nuts, gums, cotton, spices, cabinet woods, indigo, cork, dye woods, sponges, barks for the manufacture of quinine, and numerous other articles from the tropics now form a large proportion of the exports of the United States, and despite the reduction in prices in many cases the total values are steadily increasing. Add to this the sub-tropical products, such as unmanufactured silk, tea, rice and other articles of this class, and the grand total aggregates more than a million dollars for each business day of imports of a character which cannot, or, at least, are not, at present produced in the United States in sufficient quantities to meet the requirements of our population. In sugar and coffee

the United States is the largest consumer of the world, and in many other of the tropical products, such as unmanufactured silk, india rubber, fruits and nuts, and spices, we are among the largest importing nations. In coffee, owing to the reduction in price, the figures of 1901 are not as large as those of some earlier years, notably 1894 and 1895, though the quantity imported exceeds that of earlier years with possibly one or two exceptions. How much of this class of our importations may be supplied in the future by the tropical territory which has recently come under control of the United States is a matter for future development, is at least interesting to know that nearly one-half of the importations of the present time are tropical and sub-tropical in character, and that nearly all are of a class which are produced in greater or less extent in those islands or territory adjacent to them.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

THURSDAY, Sept. 19, was, as we all know, a day of mourning for the lost chief of our nation, and from Maine to California memorial exercises were the order of the day. The Hamilton, Ohio, Republican-News, of Sept. 20, contains an account of the sad services held there. Lazard Kahn, of F. & L. Kahn Bros. & Co., was chairman of the meeting, and in his opening address paid this glowing tribute to our departed leader:

"It should be forever our aim to take him for a model whose death and whose martyrdom we are here to mourn.

"He was beloved for his gentleness, for his loyalty, for his wisdom, for his patriotism and for the incarnation of all the attributes that bring humanity into the image of its Maker.

"His virtues, his devotion, his gentleness have cemented all the people of every creed in enduring bonds of love for him. We are here to shed a tear over his memory and to vow eternal allegiance to our country.

"The sun never shone upon a land or a people so prodigally endowed with all the blessings of heaven and earth as are our countrymen. It is indeed a government of the people, for the people and by the people. There lies the majesty, nobility and pre-eminence of our nation creed, the root, and motive, and provocation of our proud patriotism, the obligation of our personal devotion to and respect for faithful public servants of the people, chosen by the people."

* * *

WILLIAM WILSON, a hardware dealer located at 483-485 Exchange street, Geneva, N. Y., in a circular he sends out gives three standing rules of his store which are worthy of adoption by the trade generally:

1st—All customers to be waited on promptly, carefully and courteously, whether they wish to buy or only look at goods.

2nd—All goods are guaranteed to be exactly as represented or money refunded.

3rd—Anything bought here can be returned and exchanged before being used, excepting only such goods as have been cut or made to order.

IN The New York Commercial, of Sept. 19, I find the following:

"Louis Goldstein, of No. 43 Belmont avenue, Brooklyn, is now in correspondence with Miss Lena Pearl Matthews, of Elcello, Mo., and his friends would not be surprised if the correspondence culminated in a wedding. This happy state of affairs was brought about by an egg. It seems that while Mr. Goldstein was at breakfast one morning about a year ago he discovered that an egg he was about to relish bore the following inscription: 'Box, 96; egg, 104—To whoever receives this egg: Kindly communicate with Miss Lena Pearl Matthews, Elcello, Missouri, Feb. 3, 1900.' Mr. Goldstein decided to accommodate the fair Missourian. Not only did he write, but he sent Miss Matthews his photograph. She was pleased and returned the compliment. A rapid exchange of letters followed."

This story may be true, then again it may be a revival of the thousand and one tales of this character contained in the press the past decade. Heretofore the fair heroine has written her name and a request for correspondence on the side of a strawberry box she was crating or a sock she had knitted for the market, or a necktie which she finished, etc. The egg idea is new.

Judged as an egg story this yarn is not so entertaining as the recent tale of the Indian hen who was setting on a batch of eggs when a cobra entered through a small cavity and gulped down all the eggs it found. These eggs impeded its egress and it was caught and killed in the morning. The eggs were taken from its interior, placed under the hen again and in time duly hatched out.

Judged as a romance this story is not as instructive as the story of the man who found a similar missive on a pair of socks he had bought, and wrote a sentimental letter to the fair knitter. He received a scorching reply, in which the lady informed him that she was married and had five children, and that the message he had received had been written eight years ago. Subsequent investigation developed the fact that the merchant from whom this man bought these socks with Cupid's message attached was a man who never advertised.

While only second rate as a romance and as an egg story the gifted "faker" on the New York Commercial who evolved this story from his inner consciousness deserves credit for his felicitious powers of combination.

* * *

THE British torpedo boat "Viper" and torpedo boat destroyer "Cobra" have been wrecked. If Britannia has any ship in her navy styled the Python, Boa Constrictor, etc., it might be wise to change the name.

* * *

THE laundrymen have been holding their national convention in Detroit. All passed off pleasantly except when a Mr. Cassity, of Pittsburg, offered one Kelly, of Detroit, a recipe for taking out stains on receipt of 85 cents. Kelly produced the coin and Cassity handed

him a pair of scissors. For a time it looked as though the floor would be cleaned with the mangled body of the Smoky City apostle of cleanliness, but Cassity, by promptly "buying," saving his wretched carcass.

* * *

I WAS talking with a Michigan friend of mine the other day, who said, "Well, I see my old friend Del Dane will shake the road and soon will be sitting in an office in Kalamazoo, with his feet on a desk, clipping coupons. Did you ever hear of the Central Michigan dealer who used to go on a bat several times a month, and when he arrived home in a boozy condition would tell his better half that Del Dane was in town and he had been buying goods of him? Now Mr. Dane only made the town where this man did business once a year, so this dealer must either have been a cheap liar or a cracker jack trance medium. Well, at any rate, this man's wife got hold of Del one time when he made that town in the flesh, and there was a plunge *in medias res.* Talk about your play-acting in 'Mrs. Dane's Defense,' now at Powers Theater, in Chicago. Why it wasn't in it with "Del Dane's Defense" when accused of ordering too many liquid lullabies for the lady's spouse. So strong was this defense that Del not only stood by the lady's husband, but convinced irate madam that all was well, and that being in the night air gave her husband cerebral neuralgia, or something like that."

The casual reader should remember that this is one of those Michigan stories, and take it with the customary grain of salt.

* * *

THE Dry Goods Reporter contains an interesting article by a retail dry goods dealer, in which he narrates his experiences in meeting mail order competition. In the course of this article this dealer says:

"So long as everybody did business the same way, it made comparatively little difference. At least we thought so. But when the mail order houses commenced to go after the farmer's trade, then we felt that there was something radically wrong with our system. The farmers would bring the catalogues right into our store and show us that they could buy lots of stuff cheaper from those houses than from us. In some cases, of course, they found out that the freight ran up a good deal higher than they thought, especially on heavy goods, so that really they did not save any money by dealing with those houses, but the general effect was bad for us. They would never mention the instances where they fell down, but would invariably come in and tell us about it when they had made fifteen or twenty cents on a pair of shoes or a piece of dress goods.

"We thought the matter over carefully and finally decided to cut off from our old methods and run our business on a strictly one-price cash basis. I find that with my discounts obtained in the wholesale houses through prompt payment of my bills and by getting the money for my goods at once when they are sold, I am able not only to undersell not only my competitors who still cling to their old credit system, but also to quote lower prices than the mail order houses, not even including the freight or express charges that their customers have to add to the cost of what they buy from them. That our people realize this is shown every day."

There are many points in this article which are worthy the attention of hardware dealers. It is a curious thing that the large catalogue house, capitalized at millions, should do a cash business and the small dealer, with a capital of $5,000, should incur the risks of a credit business. Why should the dealer handicap himself by catering to the trade of all the slow payers in his vicinity while the cash payers are sending their money to Chicago catalogue houses? The dealer who sells on credit in the spring to a farmer who pays in the fall, perhaps with cash, perhaps with a note, due in 60 days or six months, is certainly seriously handicapped in competing with the catalogue house that gets its cash before it lets go of the article. It is doubtful in my mind if the farmer who asks the dealer to carry him over a year when his crops are poor, and who pays him any old time without interest, appreciates the favor the dealer is doing him. It is this sort of man who tells the dealer that an article the dealer sells for $1.00 can be bought of the catalogue house for 90 cents —no mention of 25 cents express charges being made. The dealer ought to retort that if the catalogue house had to sell on the same terms the dealer did and locked up its million capital in a stack of farmers' notes, scattered from Maine to California, it couldn't make any kind of a price either.

* * *

THE many friends of H. C. Weber, of Detroit, with the plethoric bank account, will be glad to see his features as drawn by a Detroit pencil manipulator.

Mr. Weber's bulging balance in the bank is not all due to his business ability, although he is one of the brainiest hardware men north of Chattanooga, Tenn., but to his adroitness in seeking office, as he is the treasurer of the Michigan Hardware Association and custodian of the juicy bank rolls of that organization. Was it Dane, now of Kalamazoo, or some other statistical Michigander who figured out that the Michigan retail hardware dealers were worth some more than 6,000,000 bright cartwheels. Wouldn't you feel as blithe and gay as Mr. Weber looks in the picture if you were treasurer of a $6,000,000 concern? Mr. Weber, besides being a prominent member of the Michigan Hardware Association, is widely known for his original and forceful advertising ideas, his show windows being one of the features of Detroit.

News Siftings.

The Sheridan Stove Co., Quincy, Ill., have increased their capitalization from $40,000 to $80,000.

The Pittsburgh Plate Glass Co., Pittsburg, Pa., have increased their capital stock from $10,000,000 to $12,500,000.

Walter H. Chamberlin, formerly assistant commissioner of patents has resumed the practice of law in Chicago, with offices at Adams and Dearborn streets. Mr. Chamberlin makes a specialty of patent and trademark cases. He is associated with George L. Wilkinson, for many years an assistant examiner in the patent office.

The path of an inventor is apt to be a thorny one, one of his difficulties being his hard task in finding a manufacturer for his wares, their novelty making them hard to make with the usual mechanical equipments. All inventors of novelties will find T. F. Scullin, Indianapolis, Ind., fully equipped for supplying them with the goods desired with the utmost dispatch.

The Schill Bros. Co., Crestline, O., have brought out the New Schill steel range, which has several unusual features, such as a draft door below the pouch feed, which can be opened to light fire. The reservoir casing is cast iron, and its front is covered with sheet steel, thus giving it the appearance of a steel front and saving labor in blacking. The right end of the reservoir casing is handsomely ornamented. It has spring balance oven door, ventilated oven, extra large ash pan and screw draft plate and is very handsomely nickeled.

A press dispatch from Cleveland, O., dated Sept. 22, states that the long-expected and strike-delayed buying of Bessemer pig iron has started. The United States Steel Corporation heads the list of buyers, and it comes from a reliable authority that this concern alone is taking every pound that it can lay its hands upon, leaving but little for the independent consumer. The price has not been told, but as the United States Steel Corporation fixed the last price at $15.25 in the valley it is altogether possible that they will make the same price upon the material which is now being sold.

RED CROSS STOVES AND RANGES.

J. P. Lindemann & Sons, Milwaukee, Wis., western agents for the Co-operative Foundry Co., Rochester, N. Y., send us a copy of their 1901-1902 catalogue of Red Cross stoves and ranges fresh from the press. The place of honor in this volume is accorded the Red Cross Victor planished steel range, which is built of the finest quality of planished steel, with double plates lined with asbestos. The main top is made in four sections with interchangeable key plates. The products of combustion are diverted by a plunger damper in the top and controlled by a combination wheel register and damper in the pipe. The linings are of brick or iron, as may be desired, and there is a double back fire lining. The grates are dockash or duplex, as may be preferred, and draw out in front over the hearth, instead of longitudinally. The oven door opens downward, forming a shelf, and is so balanced that it can be opened or closed with the greatest ease. It is provided with a thermometrical indicator and arranged to promote ventilation in the oven. The ash pan is very large and deep, and is provided with both bail and handle. The swing door is of a construction combining the swing and pouch feed principles. Countersunk bolts are used in the bottom oven plate, and thus a smooth surface is secured. The Victor is constructed with a sheet flue, asbestos lined and with a double flue bottom, which forms a dead air chamber under the oven. The extreme bottom or cast iron base section is another exclusive feature. The nickeled parts include steel band bordering top edge, oven door frame, panel, handle and hinges, feed door and handle, lower body panel, reservoir panel, reservoir bracket, towel rod, draft regulator, knobs, etc.

The Red Cross Oak for 1901 has body made of specially rolled steel. There are no catches, every door being secured by a turn buckle. There is a nickeled register wheel in feed door. A cast iron lining rests on the fire pot, thoroughly protecting the steel jacket from extreme heat. A gas ring around the top of the firt pot furnishes air to the surface of the fire. The ash pit door is tightly fitted and is constructed with a screw register draft damper. The register screw draft damper is constructed on the principles of a screw press, the threads of the screw being unusually fine. The closing plate also has two guide bars, which, working parallel with the screw into their respective places in the body of the ash pit door bring the damper plate perfectly true and tight into its place.

The back pages of this catalogue show an extensive list of tinware, enameled ware and sheet metal goods, including coffee boilers with flat and pit bottom, milk or rice boilers, oval wash boilers, dipper bowls, soup bowls, wash bowls, cream cans, railroad milk cans and factory cans, oil cans, oily waste cans, garbage cans, steel baskets, biscuit, cake and doughnut cutters, muffin rings, apple corers, egg whips, flue stops, squib cores, rimmed boiler covers, teakettle breasts, stove pipe collars, colanders, pieced, stamped and enameled cups, dippers, flasks, graters, coal hods, milk kettles, tea kettles, ladles, marking pots, grain measures, aerated ovens, dairy pails, dinner pails, stock and water pails, water pitchers, cake pans, Turk Head pans, patented dripping pans and a great variety of other goods in this line.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

DEATH OF FREDERICK FRALEY.

On Sept. 23 Frederick Fraley, of Philadelphia, an old-time hardware dealer, died in his 97th year. When but 17 years old he entered the hardware business as a clerk, becoming an importer shortly after reaching his majority. In 1824 he helped organize the Franklin Institute, and was the last surviving founder. He was long a prominent factor in the commercial, educational and social life of the Quaker city.

A MODERN HOUSE-WARMING.

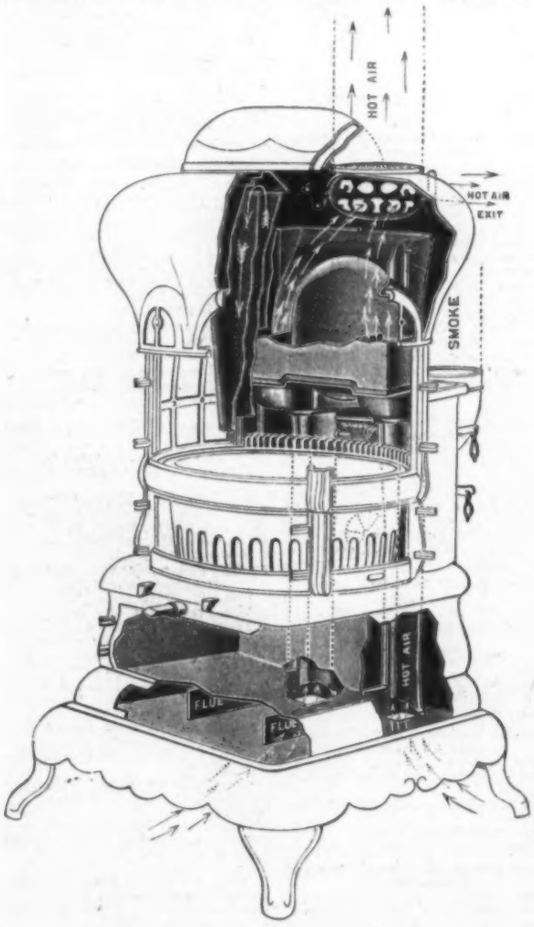
"A Modern House-Warming" is the title of a very interesting little booklet issued by Wilmot Castle & Co., Rochester, N. Y. This explains in an entertaining way the value of the New Era radiator as a fuel saver. This radiator is made in three distinct styles and many sizes, for hard and soft coal and wood. Among the striking testimonials to this radiator this firm have received is the following from C. N. Barnes, of the Barnes & Nuss Co., Grank Forks, N. D., who is well known from being prominently identified with the retail organization movement. Mr. Barnes says: "The writer has used your New Era radiator for several winters and it is with pleasure that I commend it as an article that will make friends and give entire satisfaction wherever placed. During one of the coldest winters we ever had in North Dakota, I warmed thoroughly with one of these radiators (connected to a coal heating stove), a room 16x22."

ROYAL RED CROSS PARLOR HEATER.

J. P. Lindemann & Sons, Milwaukee, Wis., western agents for the Co-operative Foundry Co., Rochester,

Royal Red Cross.

N. Y., are offering the trade the Royal Red Cross parlor heater, shown herewith. The top, instead of an urn, is finished with a genuine bronze figure, representing the knight of the red cross, mounted on his charger clad in full armor. In this heater the hot air flues form the back division flue strips, and are surrounded by the fire continually, while on its passage from the fire pot through the descending and ascending flue chambers of the exit pipe. The following parts of this stove are handsomely nickeled, viz., oven swing cover, reflector dome, ash pit door, foot rails, base, legs, shaker, plate with drop cover over shaker bar, etc. The shaker



Skeleton View Royal Red Cross.

bar on this firm's stoves has a patented handsomely nickeled hinged cover. All nickeled parts are loose and thoroughly ventilated.

It is said the chain makers' strike will be settled by September 30.

At the present time $50,000,000 is being put into new independent iron and steel plants in western Pennsylvania alone.

On and after January 1, 1902, railroads leaving Chicago will refuse to take typewriters, cash registers and computing scales as baggage.

Geo. Fisher, of the Fisher Iron & Steel Co., Quincy, Ill., was a recent caller at THE AMERICAN ARTISAN office.

James McKay & Co., Pittsburg, Pa., chain manufacturers, will have their new plant at McKees Rocks, Pa., in operation shortly. This plant contains seventy-five fires, all of which will be started shortly.

A cement to resist white heat is made as follows: Pulverized clay, 4 parts; plumbago, 2; iron filings free from oxide, 2; peroxide of maganese, 1; borax, ½; sea salt, ½. Mix with water to a thick paste, use immediately, and heat gradually to a white heat.—Ex.

The Hardware Record.

Arkansas Retail Hardware Dealers' Association.

Pres., John M. Pitman, Prescott.
1st Vice-Pres., J. F. Maxey, Ozark.
2d Vice-Pres., T. B. Stewart, Newport.
Secy-Treas., J. A. Plummer, Marianna.
Executive Com.: H. Williams, Hot Springs, J. H. Boicourt, Little Rock, J. W. Lee, Fordyce.

Chicago Retail Hardware Dealers' Association.

Pres., D. McLaughlin.
Vice-Pres., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Association of Philadelphia.

Pres., Hugh McCaffrey.
Vice- Pres., Wm. C. Peters.
Sec.-Treas., T. James Fernley.
Directors, William W. Supplee, Samuel Disston, John H. Griffith, James H. Ritter, William C. Peters, Thomas Devlin, Fayette R. Plumb, Hugh McCaffrey and T. James Fernley.

Illinois Retail Hardware Dealers' Association.

Pres., H. G. Cormick, Centralia.
Vice-Pres., Wm. Bittel, Peoria.
Sec., G. R. Lott, Chicago.
Treas., F. F. Porter, Chicago.
Ex. Com., Z. T. Miller, Bloomington; W. T. Gormley, Chicago; H. N. Murphy, Galesburg; C. Mauer, East St. Louis; C. Williams, Streator; L. Babst, Kankakee.

Indiana Retail Hardware Dealers' Association.

Pres., W. P. Lewis, New Albany.
Vice-Pres., Jas. L. Hutton, Portland.
Sec. and Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

Indian Territory Retail Hardware Association.

Pres., Geo. W. Mowbray, Tulsa.
1st Vice-Pres., J. G. Smith, Canadian.
2d Vice-Pres., Fred Parkinson, Wagoner.
Sec., Dick Miller, Poteau.
Treas., Sam R. Frazee, Vinita.

Iowa Retail Hardware Dealers' Association.

Pres., W. A. McIntire, Ottumwa.
Vice-Pres., E. G. Penrose, Tama.
Ex. Com., A. C. Heyman, Miles; L. Lindenberg, Dubuque; F. S. Narum, Waukon; E. G. Penrose, Tama; W. A. McIntire, Ottumwa; L. H. Kurtz, Des Moines; H. A. Cole, Council Bluffs; Harry Vincent, Ft. Dodge, W. H. Miller, Cherokee; M. W. Keating, Afton; Jacob Seither, Keokuk.

Kansas Hardware Dealers' Ass'n.

Pres., Geo. F. Andersen, St. Marys.
Vice-Pres., Oscar Rohhr, Topeka.
Sec., J. A. Cole, Topeka.
Ex. Com., James H. Hamilton, Arkansas City; E. I. King, Logan; T. H. Kiniry, Beloit; J. M. Walters; Robinson; F. W. Bartlett, Kansas City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., Geo. Dehler, Louisville.
1st V.-P., J. S. Ogden, Ashland.
2nd V.-P., Chas. D. Winn, Paris.
Sec., Paul Wagner, Louisville.
Asst. Sec., Wm. Dehler, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres. H. C. Minnie, Eaton Rapids.
Vice-Pres., Geo. W. Bruske, Saginaw.
Sec., Fred H. Cozzens, Detroit.
Treas., Henry C. Weber, Detroit.
Ex. Com., Samuel Winchester, Jackson; Fred S. Cook, Fowlerville; C. E. Pipp, Ostego; A. Harshaw, Delray; A. J. Scott, Marion City; James J. Potter, Alpena; Jno. W. Jochin, Ishpeming; Robt. G. Chandler, Coldwater; John Popp, Saginaw, F. S. Carlton, Calumet.

Minnesota Retail Hardware Association.

Pres., W. H. Tomlinson, LeSueur.
Vice-Pres., H. S. Cleveland, Minneapolis.
Sec., T. McCracken, Minneapolis.
Treas., G. M. Evanson, St. Peter.
Ex. Com., F. H Hunt, Red Lake Falls; B. J. Kernkamp, St. Paul; Julius Schmidt, Wabasha; W. H. Tomlinson, LeSueur; A. C. Hatch, Battle Lake; Jos. Mason, St. Peter; Chas. F. Ladner, St. Cloud; S. R. Nelson, Owatonna; E. H. Loyhed, Faribault.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., B. F. Naylor, Marshall.
V.-P., Geo. R. Plowman, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., R. L. Hixon, Hannibal; F. A. Kannsteiner, St. Louis; J. W. Poland, Carrollton; W. A. Wingert, Kansas City.
Advisory Board, P. E. Harney Joplin; E. Stuelzing, Kansas City; J. M. Kenyon, Maitland; W. T. Shoop, Richmond; G. A. Pauly, St. Louis.

National Hardware Association.

Pres., R. W. Shapleigh, St. Louis.
Second Vice-Pres., Brace Hayden San Francisco.
Sec-Treas., T. James Fernley, Philadelphia.
Ex. Com., W. K. Belknap, Louisville; John C. Koch, Milwaukee; R. A. Kirk, St. Paul; Samuel A. Bigelow Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland, John Bindley, Pittsburg

National Retail Hardware Dealers' Association.

Pres., W. P. Lewis, New Albany, Ind.
Vice-Pres., Geo. Hubbard, Flint, Mich.
Sec., M. L. Corey, Argus, Ind.
Treas., H. T. Helgeson, Milton N. D.
Ex. Com. Z. T. Miller, Bloomington, Ill.; Fred Neudorff, St. Joseph. Mo; I. A. Sibley, South Bend Ind.; H. A. Cole, Council Bluffs, Ia.; H. G. Cormick, Centralia, Ill.

North Dakota Retail Hardware Dealers' Association.

Pres., H. T. Helgesen, Milton.
Vice-Pres., H. N. Joy, Hamilton.
Treas., W. H. Pinkerton, Lakota.
Sec., C. N. Barnes, Grand Forks.
Ex. Com., H. Harrington, Fargo; W. W. Jamieson, Wahpeton; H. F. Strehlow, Casselton; I. L. Newgard, Grafton; H. B. Allen, Jamestown; H. A. Mae, Church's Ferry.

Ohio Hardware Association.

Pres., O. M. Scott, Marysville.
Vice-Pres., W. P. Bogardus, Mt. Vernon.
Cor. Sec., Geo. Gray, Coshocton.
Financial Sec., Will C. Jones, Columbus.
Treas., H. G. Woodward, Sidney.
Ex. Com., Geo. B. Meyer, Cincinnati; Geo. V. Guyton, Ada; H. F. Rahe, Cleveland; J. Rohrbacher Akron; A. H. Strome, Warsaw, Frank Winters, Lancaster; James B. Carson, Hamilton; R. Brown, Washton Court House.

Philadelphia Retail Hardware Dealers' Association.

Pres., Frank Schmidt.
Vice-Pres., Julius M. Aff.
Sec., T. B. Hendricksen.
Treas. Edward H. Shannon.
Trustees, Wm. E. Andrews, Lewis C. Claditg and Aaron I. Sanson.

St Louis Stove Dealers' Ass'n.

Pres., F. A. Kansteiner.
First Vice-Pres., Aug. Steinmeyer.
Second Vice Pres., Aug. Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Association.

Pres., J. D. Moore, Birmingham Ala.
1st Vice-Pres., F. A. Heitman. Houston, Tex.
2d Vice-Pres., Bruce Keener. Knoxville, Tenn.
Sec., C. B. Carter, Knoxville, Tenn.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, N. C.; B. F. Eshleman, New Orleans.

Texas Hardware Jobbers' Association.

Pres., F. A. Heitman, Houston.
1st Vice-Pres., J. C. Bering, Houston.
2d Vice - Pres., Ed. Strauss, Waco
Sec.-Treas., Robert Eikel, Houston.
Ex. Com., Jas. Moroney, Dallas; R. F. Bell, Weatherford; W. L. Sanford, Sherman; A. E. Goeth, Austin.

Wisconsin Retail Hardware Dealers' Association.

Pres., John Hessel, Antigo.
Vice-Pres., Otto Schlafer, Appleton
Sec., C. A. Peck, Berlin.
Treas., George Leverenz, New Holstein.
Ex. Com., Henry Droegkamp, Milwaukee; Arthur Heins, Tigerton; E. H. Ramm, New London; J. Wi[illegible]kie, Fond du Lac.

The Fleming Window Screen Co., capitalized at $10,000, is a new Hillsdale, Mich., concern.

The New England Hardware Dealers' Association held their first meeting since the summer at the United States Hotel, Boston, Sept. 11, at 5 p. m.

The Samuel Nafew Co., New York and Chicago, send us a blue and white circular calling attention to their Samson nail puller. The rammer and standard are made of malleable iron and cannot break. The forgings are of steel and the jaws are nicely tempered.

The Executive Committee of the Wisconsin Retail Hardware Dealers' Association met at Fon du Lac, Wis., on Sept. 17, and transacted various business of a routine nature. They also decided to hold the next annual meeting at the Republican House, Milwaukee, on the first Wednesday in February, 1902.

The Michigan Hardware Mfg. Co., Grand Rapids, Mich., favor us with their latest catalogue of crystalized metal covered stove boards. These boards have as a base a two-ply crossed grain wood base, whose corners are protected by metal guards so placed that the crystallized metal cover may be formed around the top, edge and bottom perfectly smooth. The edges on the under side of the base are forced into the wood in such a manner as to avert all possible danger of projecting outward and becoming entangled with the carpets or rugs, or severing the cover from the base or wooden bottom. Their asbestos lined stove board "A" has an asbestos lining between the wood bottom and the sheet metal covering, which averts all danger of the heat coming in contact with the wood lining, carpet, etc. This volume also shows a couple of their hardware specialties in the improved "Gem" hose plier and the "Crescent" fruit can holder.

The Supplee Hardware Co., Philadelphia, are manufacturers of a complete line of lawn mowers, including the Pennsylvania, Pennsylvania High Wheel, Pennsylvania Golf, Continental, Continental High Wheel, New Quaker City, Great American, Great American Ball Bearing, Rapid Transit, New Departure, Belmont, Girard, Girard High Wheel and Westfield. Their Great American ball bearing lawn mower is built with as great a degree of perfection in regard to the ball bearings as can be found in any bicycle manufactured, and the adjustment is unequalled. This mower has driving wheels 10 inches in diameter, steel balls of the highest grade, placed in a dust proof steel covered cup, and open cylinder with five solid cast steel cutting knives. The Pennsylvania Golf lawn mower has extra strengthened open cylinder, six cast steel hardened and tempered cutting knives, double train of gears, solid cast steel bed knife. It will cut the thickest lawns without ridges to within 3/8 of an inch of the ground.

William Allen White has just returned from Lawton, where he went to write for The Saturday Evening Post, of Philadelphia, the story of the "opening" of the Indian lands. Mr. White's vivid account of the mushroom city that sprang up in a night is of striking and timely interest.

PROGRAM NATIONAL HARDWARE ASSOCIATION.

The program of the seventh annual convention of the National Hardware Association, which will be held at Cleveland, Oct. 9 to 11, shows that this convention will be one of unusual interest. Secretary T. James Fernley has been out gunning in the tall timber for "collocutionists," as is shown by a reference to this program. Frank Dickerson, general sales agent of the American Tin Plate Co., New York City, J. C. Brainerd, sales manager of the Johnson & Jennings Co., Cleveland, O., and Henry R. Towne, president of the Yale & Towne Mfg. Co., Stamford, Conn., most certainly can give the jobbing trade some valuable tips on the question, "Will Present Range of Prices Probably Prevail?" All the hardware trade will certainly be glad to learn the opinions of such leaders in the hardware manufacturing world, as Hon. D. G. Goodell, president of the Goodell Cutlery Co., Antrim, N. H.; William Bates, sales manager of the Kirk-Latty Mfg. Co., Cleveland; Wm. N. Powell, treasurer of the Columbian Hardware & Mfg. Co., Cleveland; Gen. W. H. Withington, of the Withington & Cooley Mfg. Co., Jackson, Mich.; G. E. Needham, vice president of the Garry Iron & Steel Co., Cleveland, O.; C. S. Van Wagoner, Cleveland, O., and George V. Willson, secretary and treasurer of Hussey, Binns & Co., Pittsburg, Pa., on the vital topic of "How Can Manufacturers of Hardware and Kindred Lines Most Economically Distribute Their Product?"

The program, with names of speakers to the collocutions, is as follows:

PROGRAM.

WEDNESDAY MORNING, 9:30 A. M.

(This session is open to manufacturers, their representatives, the ladies and members of the press, and it is requested that all assemble promptly at the hour named.)

The lady visitors are requested to meet Cleveland ladies' resident committee in parlor at 10:30 a. m.

Opening Remarks, President Richard W. Shapleigh.

Prayer, Rev. Dr. S. P. Sprecher.

Chorus, "America."

Address, Tendering Freedom of the City, Mayor Hon. Tom L. Johnson.

Address on behalf of the Cleveland Chamber of Commerce, by President Charles W. Pack.

Address of welcome on behalf of the manufacturers of Cleveland, S. D. Latty.

Roll call.

Reading of the minutes of the 1900 convention.

President's Annual Address.

Report of the secretary-treasurer.

Introduction of fraternal delegates of the Canadian Wholesale Hardware Association—W. Starke Howden, Starke & Co., Montreal; Thomas B. Lee, Rice, Lewis & Son, Ltd., Toronto; James Hardy, Jenkins & Hardy, Toronto.

Collocution: "How Can Manufacturers of Hardware and Kindred Lines most Economically Distribute Their Product?"

Hon. D. H. Goodell, ex-Governor of New Hampshire, president of the Goodell Cutlery Co.

William Bates, sales manager Kirk-Latty Mfg. Co.

Wm. M. Powell, treasurer Columbian Hardware & Mfg. Co.

Gen. W. H. Withington, president of the Withington & Cooley Mfg. Co.

G. E. Needham, vice-president the Garry Iron & Steel Co.

C. S. Van Wagoner.

George V. Willson, secretary and treasurer Hussey, Binns & Co.

WEDNESDAY NOON.

Session of metal dealers.

Immediately after the morning session all members of the association who deal in tin plate and metals will plan to meet for a conference.

WEDNESDAY AFTERNOON.

Delegates will assemble at 2:30 sharp.

Report of Executive Committee.

Report of Membership Committee.

Report of Grievance Committee.

Report of Fraternal Relations Committee.

Report of Press Committee.

Report of Transportation Committee.

Report of Entertainment Committee.

Report of Metal Committee.

Report of Heavy Hardware Committee.

Communications.

Discussion: "True Method of Cost."

Question box.

Miscellaneous Business.

WEDNESDAY EVENING, 8:00 P. M.

Annual smoker.

THURSDAY MORNING, 9:30 SHARP—EXECUTIVE SESSION.

Delegates will kindly assemble promptly.

Miscellaneous business.

Discussion of questions to be drawn from the question box.

Miscellaneous business.

Consideration of committee reports.

THURSDAY AFTERNOON, 2:00 O'CLOCK.

Drive.

THURSDAY EVENING, 8:00 O'CLOCK.

Open session. Manufacturers, their representatives and members of the press cordially invited.

"Outlook for the Approaching Year; Will Present Range of Prices Probably Prevail?"

Frank Dickerson, general sales agent the American Tin Plate Co.

J. C. Brainerd, sales manager the Johnson & Jennings Co.

Henry R. Towne, president Yale & Towne Mfg. Co., Stamford, Conn., and others.

Collocution: "Trade Papers: Their Relation to Jobbing Interests."

R. R. Williams, editor *Iron Age*.

Daniel Stern, president THE AMERICAN ARTISAN AND HARDWARE RECORD.

A. Eugene Bolles, *Hardware*.

FRIDAY MORNING, 9:30 O'CLOCK.

Delegates are requested to report promptly.

Miscellaneous business.

Election of officers.

Discussion.

Arranging seat of next convention.

Miscellaneous business.

FRIDAY AFTERNOON, 2:00 O'CLOCK.

Introduction and installation of officers.

RECEPTION BRIGADE ALREADY IN SHIRT SLEEVES.

The only people who speak disparagingly of Cleveland as a convention city are those who never attended a convention there. Everybody who has once attended a trade or other meeting in that Lake Erie city grows as enthusiastic over Cleveland's claims as is the entire populace of that pretty municipality, which has mastered the canny art of dexterously combining dignity and hustle. The Cleveland manufacturers have already held several meetings, and have appointed the following reception committee under the style of Cleveland Manu-

facturers' Committee: S. D. Latty, chairman, The Kirk-Latty Mfg. Co.; E. S. Page, vice chairman, The Cleveland Wire Spring Co.; F. G. Smith, secretary, The Osborn Mfg. Co.; F. F. Prentiss, The Cleveland Twist Drill Co.; A. S. Upson, The Upson Nut Co.; C. E. Adams, The Cleveland Hardware Co.; W. P. Champney, The Eberhard Mfg. Co.; Lyman H. Treadway, The Peck, Stow & Wilcox Co.; W. S. Bidle, The Cleveland City Forge & Iron Co.; A. T. DeForest, American Steel & Wire Co.; N. D. Chapin, The Billings-Chapin Co.; H. F. Lyman, The Upson-Walton Co.; Frank W. Davis, The Lake Erie Iron Co.; E. G. Buckwell, The Cleveland Twist Drill Co.; Thos. P. Robins, The Cleveland Hardware Co.; W. N. Bowler, The Forest City Paint & Varnish Co.; R. S. Pierce, Mechanical Rubber Co.; C. T. Draper, American Tin Can Co.; Geo. W. Ford, The Sherwin-Williams Co.; Geo. M. North, The Lamson & Sessions Co.; Wm. Bates, The Kirk-Latty Mfg. Co.; H. W. Avery, The Avery Stamping Co.; C. C. Paine, The H. C. Tack Co.; H. W. Caldwell, The Cleveland Stone Co.; J. C. Brainerd, The Johnson & Jennings Co., and F. A. Scott, secretary the Cleveland Chamber of Commerce.

This committee are all working energetically to maintain the hospitable name of their city.

The committee have already formulated the following plans. Wednesday night there will be a smoker. Following the smoker, there will be a drive on Thursday afternoon through Cleveland's parks and boulevards, which are, perhaps, unequalled by any of the world. On Friday evening a banquet is to be served in the auditorium of the Chamber of Commerce. The appointments for this banquet will be exceptionally fine and attractive, and the list of speakers such as any citizen would be warranted in going a long distance to hear. The toastmaster will be the Hon. Francis J. Wing, United States District Judge. There will be addresses by Richard W. Shapleigh, president of the National Hardware Association; Hon. Marcus A. Hanna, United States Senator; Hon. Virgil P. Kline, and the Hon. James M. Hoyt. The ladies accompanying delegates will be invited to attend, adding to the pleasure of the occasion with their presence. The Cleveland manufacturers are also providing additional entertainment for the ladies during the executive session of the convention.

HARDWARE MANUFACTURERS MAY ORGANIZE.

Retail hardware dealers have their National Retail Hardware Dealers' Association, and the jobbers have their National Hardware Association. It yet remains for manufacturers to join hands and that this will shortly be done is shown by the following letter sent the trade from Pittsburg, under date of September 25th. "The National Jobbers' Hardware Association meets at Cleveland, Ohio, October 9th to 11th. It has been suggested that the manufacturers attending this convention and any manufacturers affiliated with the hardware trade, meet at the same time and consider the advisability of forming an American hardware manufacturers association. It is hoped that you will attend this meeting and be prepared to take part in the discussion."

FAVORS A MANUFACTURERS' ASSOCIATION.

A leading manufacturer writes us as follows, under cover of Sept. 25, 1901: "You have no doubt received a notice suggesting the advisibility of organizing a hardware manufacturers' association. No very definite plans have been made by the parties originating this scheme, but the general idea was to have such an association meet at the same time as the national and southern associations. The manufacturer would then feel that he was not altogether a camp follower."

FAVORS A HARDWARE CLUB IN CHICAGO.

TO THE AMERICAN ARTISAN.

I think a hardware club organized on about the lines of the Hardware Club in New York would be very successful in Chicago. The local and visiting manufacturers and jobbers would be glad to have such headquarters in your city. "MFR."

Pittsburg, Sept. 25, 1901.

MEETING CANADIAN WHOLESALE HARDWARE ASSOCIATION.

The Canadian Wholesale Hardware Association held its third annual meeting at Toronto, September 13 last. The following representatives of the Canadian hardware jobbing trade were present: Thomas Birkett, Thomas Birkett & Son Co., Limited, Ottawa; John Bowman, the J. Bowman Hardware & Coal Co., London; E. Panneton, the Canadian Hardware Co., Montreal; T. H. Newman, Caverhill, Learmont & Co., Montreal; E. Dupre, the Chinic Hardware Co., Montreal; A. Jeannotte, L. H. Hebert, Montreal; W. R. Hobbs, the Hobbs Hardware Co., London; C. A. Whitwam, the Hobbs Hardware Co., London; W. Starke, Howden, Starke & Co., Montreal; Peleg Howland, H. S. Howland Sons & Co., Toronto; Thomas G. Dexter, H. S. Howland, Sons & Co., Toronto; Fred O. Lewis, Lewis Bros. & Co., Montreal; Thomas B. Lee, Rice, Lewis & Son, Limited, Toronto; A. G. Macpherson, A. Macpherson & Son, Montreal; W. Vallance, Wood, Vallance & Co., Hamilton; Joseph Lemieux, N. Lemieux & Fils, Quebec.

The election of officers for the ensuing year resulted as follows:

President, W. Starke, Howden, Starke & Co., Montreal; vice-president, Thomas B. Lee, Rice, Lewis & Son, Limited, Toronto; secretary-treasurer, Mr. James Hardy, Jenkins & Hardy, Toronto. Executive committee: Messrs. John Bowman, the John Bowman Hardware & Coal Co., London; Thomas Birkett, M. P., T. Birkett & Son Co., Limited, Ottawa; Joseph Lemieux, N. Lemieux & Fils, Quebec; Frank O. Lewis, Lewis Bros. & Co., Montreal; Alfred Jeannotte, L. H. Hebert, Montreal, and Secretary-Treasurer Hardy.

An invitation to send delegates to the annual convention of the National Hardware Association of the United States, to be held at Cleveland, Ohio, October 9 to 11, was read. The invitation was accepted, and President W. Starke, Vice-President Thomas B. Lee and Secretary Hardy were appointed delegates to represent the Canadian organization at the said convention.

NAIL PULLERS.

Smith & Hemenway, 296 Broadway, New York, are manufacturers of the nail puller shown in the accompanying cuts. The Diamond "B" (Figure 1) is a puller with a black handle, black enameled rammer with a

Fig. 1.

polished foot. It is made from first-class steel and comes in two sizes. It is a cheap and serviceable puller.

Figure 2, the Eureka, is a first-class warranted nail puller, brought out to meet the demand for a serviceable puller at a popular price. This tool is made of Swedish steel with a black handle, black

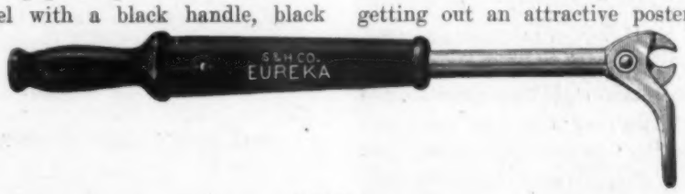


Fig. 2.

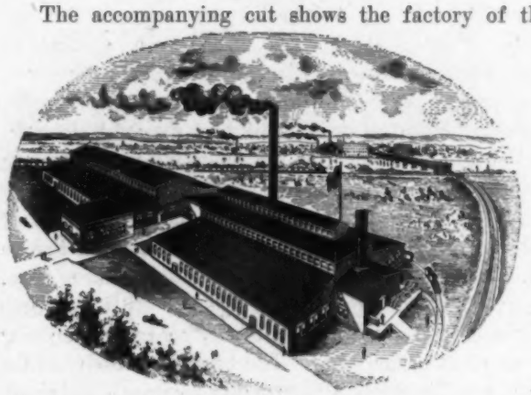
enameled rammer and a polished foot. This puller comes in two sizes.

The Genuine Giant nail puller has been improved, not only in pattern, but in quality. They have expended time and money to produce a tough and non-brittle stock. There is no tool that requires a better steel than a nail puller. They have endeavored in the Giant to make the best puller possible. Every tool is warranted and saves time, labor, boxes and nails. It will pay for itself in a few days. This puller comes in three sizes. This puller is imitated by many, but equalled by none. It is made with a white handle, black enameled rammer, which is octagon in shape, measuring 12 inches, and a polished Swedish steel foot.

This firm would be pleased to send their "Green Book of Hardware Specialties" to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

SAD IRON FACTORY.

The accompanying cut shows the factory of the



Sad Iron Factory.

Dover Mfg. Co., Canal Dover, O., who have just started up in the manufacture of sad irons at that point, having removed there from Stoughton, Wis. This firm broke ground in their Ohio location in October, 1900, and have just started up. There main building is 200x80 feet in dimensions, with an annex 120x80 feet, these are connected by a building 24x60 feet in dimensions. Their office, which is now being built, is 36x36 feet in dimensions. This firm will push these popular sad irons of theirs energetically.

AN ARTISTIC POSTER.

The National Sweeper Co., Marion, Ind., are just getting out an attractive poster, a reduced *facsimile* of which is shown herewith. These posters are printed in 12 colors. The background is a light shade of olive green, the sweeper is shown in golden oak with hand-

National Sweeper Poster.

some grain effect, and is set in front of a cluster of golden rod flowers. The ribbon running through the top of the sweeper and around the edges is shown in

blue, with the upper and lower panels in red with black letters, which lends a striking effect, and the National Sweeper Co. is to be complimented in getting out such attractive advertising matter. These posters will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

JEWEL STOVES AND RANGES.

The Detroit Stove Works, Detroit, Mich., favor us with their latest artistic catologue of Jewel stoves and ranges. This catalogue has stiff red covers and contains nearly three hundred pages of illustrations and descriptions of the various Jewel stoves and ranges. The place of honor in this interesting volume is accorded the Premier Jewel steel range, for hard coal, soft coal, coke, or wood. The body is made of the best heavy polished steel of uniform blue and is lined with asbestos to retain heat and economize fuel, reinforced and protected by steel and cast plates. These ranges have wrought steel oven, Dean patent oven bottom, cast protection plate over oven top, oven door counterbalanced, strong cast oven rack; fire-box supplied with duplex grate, duplex grate easily removed or replaced through special grate door, fire-box extension at rear end, extra heavy iron linings, draft-slide full length of fire-box; spacious hopper feed door; deep, white enameled reservoir, flue shifting reservoir damper, reservoir top flush with top of range, cover japanned and handsomely illuminated; range supplied with broiling doors, with draft slide; top plate cast in sections to obviate cracking; vertical damper; large bailed ash-pan; tight-hinged ash pit door and tight-hinged clean-out door.

The nickeled parts include oven door frame and handle, panels on oven door, on cheek of reservoir casing, and on rolling front of high closet, outer plate on hopper feed door, clean-out door, ash-pit door, two teapot shelves, two high-closet and high-shelf brackets, high closet corners, high-shelf corner pieces, upper and lower bands on high closet, band on high shelf, handle of high-closet rolling front, band on top plate with cast ends, towel rod and extra heavy plate on all.

The Merit Jewel cast range, for hard coal, soft coal or wood, has an oval fire-box, extra heavy durable fire-box linings, draw center grate, for soft coal, duplex or draw center grate for hard coal, special wood grate, high oven, grate easily removed without disturbing the linings, large oven rack, oven plates skillfully fitted, tin-lined oven door, direct draft, vertical damper, large draw hearth, extra large and deep bailed ash-pan, large-hinged flue door, sheet flue construction, extra heavy Jewel covers, one made in reducing rings, top plate cast in sections, attractive high shelf and high closet, white enameled reservoir and flue-shifting reservoir damper.

The Ideal Jewel, double heating base burner, has a hot air circulating flue in back which takes the cold air from the floor drawing it upward. The back flues cover the entire back so that the maximum of radiating surface is obtained. The hot air circulating flue is connected with the double heating collar at top, giving a powerful double heating attachment for heating rooms on the upper floor.

The fire pot may be revolved and is made the right weight for durability. The duplex grate is so made that it cuts out the clinkers and dead ashes. The automatic inner magazine cover rises and falls with the swing of the top. It forms a tight cover under the nickle top, making a double preventative against escaping gas and also protecting the nickel from tarnishing. This stove has brilliant mica illumination, the mica being cut in uniform square pieces, making it easy to put in or replace. The air-tight screw draft register in the ash door gives perfect control of the fire. There is a roomy teakettle attachment and a one-piece gas-tight cast elbow. The nickeled parts include front and side base strips and legs, large foot-rails, attractive nameplate above ash door, handsome ash door with screw draft register and handle, reflector corner wings, elegant and massive reflector head, swinging top cover, knobs, lunge pins, poker, shaker and door panels in oven.

ARE THEY CONCENTRATING PLANTS?

A press dispatch from New York, dated Sept. 24, states that the United Steel Corporation are planning to concentrate their plants. The New York Commercial of Sept. 25 says, anent this affair:

"The last deal along the lines of centralization was the concentration of the Steel Corporation's coke properties, and the next move probably will be the consolidation of the American Tin Plate Co. and the American Sheet Steel Co. These two concerns suffered more in consequence of the strike than any other constituent company affected.

"The centralization plans of the steel combine have been changed somewhat by developments in connection with the strike. For example, a number of plants that were scheduled for removal to more advantageous points, will be allowed to remain where they are, owing to the peaceful attitude of the employes during the recent labor trouble. It can be stated on good authority, however, that the officials of the United States Steel combine do not propose to remove any of the large plants. The plants now scheduled for removal are small, and their dismantling will not affect to any noticeable extent the business of the towns or cities in which they are located. Pittsburg and other important iron centers will naturally reap immense benefits through the centralization policy of the steel combine, as they will be selected as the collecting points for the concerns slated for removal.

"Plans have been prepared for the enlargement of a number of plants, among them the American Bridge Co., American Tin Plate Co., American Sheet Steel Co. and Carnegie Co. The Bridge Co. will have works in Pittsburg that will have a capacity greater than that of any plant in the world. The tin plate capacity of the American Tin Plate Co. will also be greatly enlarged, and the same can be said of the Carnegie Co., which has agreed to double its armor plate capacity."

Advertising Department.

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

Herewith we reproduce the advertisement of a hardware dealer in a small city, as they appear in the two local weeklies. It cannot but strike the attention of the observer that one of these advertisements is very

Just a Moment, Please

It isn't often we have a Special Sale, but when we do, it means MONEY in YOUR POCKET.

Look at These Prices:

A SIX-HOLE STEEL RANGE, High Closet and Reservoir, Planished Steel, Coal and Wood Grate, Large, Square Oven. Regular price $37—SPECIAL PRICE..... **$28.50**

A SIX-HOLE STEEL RANGE, with High Closet and Copper Reservoir, Combination Coal and Wood Grate. Large, Square Oven, Regular price, $43—SPECIAL PRICE..... **$32.48**

A FINE, WROUGHT STEEL RANGE, Large, High Closet, 12-gallon Copper Reservoir; Coal and Wood Grate; 6-Hole, Large Square Oven, Regular price, $50—SPECIAL PRICE..... **$36.63**

All Our Stoves are Guaranteed Perfect Bakers.

A LARGE SQUARE OVEN, SIX HOLE COOK STOVE, for Coal and Wood Large Reservoir; Large Ash Pan. A Beauty. Regular price $33—SPECIAL PRICE..... **$23.50**

ONE EXTRA LARGE No. 8, FOUR-HOLE COOK STOVE, for Coal and Wood; Large Reservoir; Extra Large, Square Oven. Regular price $27—SPECIAL PRICE..... **$20.00**

If fact, any Cook Stove in the House at ACTUAL COST.

A GOOD, MORTISED, FOUR-PANNEL SCREEN DOOR, any size, regular price, $1.00—SPECIAL PRICE..... **75c**

Extra Special.

A GOOD, THREE-BURNER GAS STOVE, complete, with large size Russia Iron Oven, regular price $6.50—SPECIAL PRICE..... **$4.65**

Still Another One.

A 12-inch, 14-inch, 16-inch, or 18-inch LAWN MOWER. We guarantee them. Your choice for..... **$2.65**

A Genuine Copper Wash Boiler, full size 8 for..... $2.00

A CLOTHES WRINGER that is warranted for three years, not $3.50 the regular price, but at our SPECIAL PRICE..... **$2.48**

We handle no seconds or shoddy goods; but we do, and will sell you GOOD GOODS at a less price than you can buy of anyone.

THE PAVEY HARDWARE COMPANY.

much better displayed than the other. One advertisement looks a great deal like a page torn out of one of the pioneer type specimen books, as it contains a variety of out-of-date, space-filling type faces. The other advertisement uses fewer faces and the styles used are better fonts for display use.

The judgment of the compositor as to lines that should be displayed seems to have been vastly better in one case than the other. Take, for instance, the phrase, "In fact, any cook stove in the house at Actual Cost." Now the emphatic words in this phrase are not "in fact, any cook stove," but "actual cost."

It is a mooted point amongst dealers who have given considerable thought and study to the ubject of retail advertising as to whether or not it is advisable to give prices in advertising. When they are given, however, they should be displayed strongly, as they are in the smaller of these advertisements.

The dealer who takes space in two competing

"Just a Moment, Please."

It isn't often we have a Special Sale, but when we do, it means MONEY in YOUR POCKET.

LOOK AT THESE PRICES.

A 6-HOLE STEEL RANGE, High Closet and Reservoir, Planished Steel, Coal and Wood Grate, Large, Square Oven. Regular Price, $37.—SPECIAL PRICE, $28.50.

A 6-HOLE STEEL RANGE, with High Closet and Copper Reservoir; Combination Coal and Wood Grate. Large, Square Oven. Regular Price, $43.—SPECIAL PRICE, $32.48.

A FINE, WROUGHT STEEL RANGE, Large, High Closet, 12-gallon Copper Reservoir, Coal and Wood Grate. 6-Hole, Large, Square Oven. Regular Price, $50.—SPECIAL PRICE, $36.63.

All Our Stoves are Guaranteed Perfect Bakers.

A LARGE SQUARE OVEN, 6-HOLE COOK STOVE, for Coal and Wood, Large Reservoir, Large Ash Pan. A Beauty. Regular Price, $33.—SPECIAL PRICE $23.50.

ONE EXTRA LARGE, No. 8, 4-HOLE COOK STOVE, Coal and Wood, Large Reservoir. Extra Large, Square Oven. Regular Price, $27.—SPECIAL PRICE $20.

IN FACT ANY COOK STOVE

In the House at Actual Cost.

A GOOD, MORTISED, 4-PANEL SCREEN DOOR, any size. Regular Price, $1.—SPECIAL PRICE 75c.

EXTRA SPECIAL.

A GOOD 3-BURNER GAS STOVE, Complete, with Large Size Russia Iron Oven. Regular Price $6.50.—SPECIAL PRICE $4.65.

STILL ANOTHER ONE.

A 12-INCH, 14-INCH, 16-INCH, or 18-INCH LAWN MOWER,

Take Your Choice, $2.65, We Guarantee Them.

A GENUINE COPPER WASH BOILER, Full Size 8, For $2.00.

A CLOTHES WRINGER THAT IS WARRANTED FOR THREE YEARS. Not $3.50, the Regular Price, but at $2.48, OUR SPECIAL PRICE.

We handle no seconds or Shoddy Goods. But we do, and will sell you GOOD GOODS at a less Price than you can buy of ANYONE.

THE PAVEY HARDWARE CO.

papers can, by carefully comparing both advertisements and calling the solicitors' attention to points wherein the opposition paper made the better display or used better type, put both papers decidedly on their mettle as regards his advertisements, and thus secure the best typographical results that his local community could afford.

Heating and Ventilating.

Crocker & Andrews are a new firm of New York heating contractors, located at 242 Fourth avenue.

The Isaac P. Taggart Heating & Manufacturing Co. is a new Philadelphia concern, incorporated with a capital stock of $10,000.

Emanuel Detweiler, Chas. School and H. J. Matthews are the incorporators of the Hot Water & Steam Generating Co., Milwaukee, Wis., capitalized at $25,000.

W. H. Switzer, vice president of the Utica Heater Co., Utica, N. Y., has been west on a business trip, and while here favored THE AMERICAN ARTISAN office with a call. Mr. Switzer reports that Superior furnaces and Utica heaters have been in unusual demand the past few months—August having been the best month in their history. This firm anticipated the wants of the trade and were well stocked up with material during the steel strike. Consequently they are in a position to ship promptly.

The residents along the "Q," within counting distance of Chicago, are great golfists and there has been the hottest kind of a contest between Riverside, Belmont, Hinsdale Aurora and La Grange for the Burlington competition cup, for which is open to these five clubs.

Up till October 17, Hinsdale will hold this cup, her victories being largely due to the prowess of her captain, S. O. Dugger, who, in the fourth team match for this cup, held September 26, made the best medal score, coming in with a total score of 88, against a bogey of 82.

IDEAL BOILERS.

The American Radiator Co., Lake and Dearborn streets, Chicago, send us a very handsome catalogue of their Ideal boilers. The cover design, press work, illustrations, etc., are all of the highest grade, making this volume an unusually striking one.

In the Ideal Sectional 18 and 24 inch boilers there is a large amount of overhanging surface in the fire pot. The course of the gases is from the back of the boiler, forward, through ample flues at the side, returning through a large flue at the center, and the design of these flues is such that they are readily kept clean and free from accumulations of soot. The fire pot is corrugated, thereby increasing the fire surface and securing perfect combustion at the edge of the fire. The sections are connected by push nipples, one at the top and one at either side at the bottom. These push nipples are of cast iron, the same material as the sections.

The grates allow for liberal air space, yet the fingers of the grate bars are sufficiently close together to permit the use of pea or slack coal. Through a door provided for the purpose it is possible to remove, by means of a slice bar, any clinkers which may form upon the grates.

The Ideal Premier boilers for hard coal have a fire pot of unusual depth. The large center column is connected with the sides by radial arms, to secure perfect circulation within the boiler itself. This center column, containing a considerable quantity of water, overhangs the fire in a most effective manner. The sections above it and connected with the dome, also contain a continuous column of water corresponding in diameter to that of the fire pot. When the boiler is erected the sections should be arranged so that the flues may be made to stagger in their relation with the flues of the other sections. The sections are connected at the center by means of threaded cast iron nipples, and are of ample diameter to secure a perfect circulation within the boiler itself. Inasmuch as the expansion and contraction in this form of construction is from the center outward, there is no difficulty with breaking sections.

A circular baffle plate in the hood regulates the draft through the flues of the dome, and for the further control of the draft the hood is equipped with a check door. The rocking and dumping grate is both simple and effective. The grate ring has been entirely eliminated, and the base itself becomes the holder as support for the grate bars.

In the Ideal portable steam boilers liberal waterways are provided at the side, through which the water rises from the fire pot and intermediate sections to the steam dome, or top section, in which the water line is carried. At the back of the boiler another waterway connects the steam dome, or top section, with the firepot, passing through, but having no connection with the intermediate sections. Through this port, or water-way, at the back, there is opportunity for perfect circulation within the boiler itself. The space in the smoke dome is divided by baffle plates, so that when the direct damper is closed the heated gases are diverted down between the casing and the front of the boiler, thence around the fire pot and up inside the casing at the back, from whence it passes up the smoke pipe. When the direct damper is open the products of combustion pass upward through staggered flues in the several sections and directly through the steam dome to the smoke pipe. Tapered push nipples of cast iron are used to connect the sections. The jacket consists of cast iron pancls. This catalogue will be found of unusual interest to all interested in steam and hot water heating. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Gobeille Pattern Co., Cleveland, O., send us a very pretty circular in which they state that the popularity of direct draft heating stoves, hot blasts, Oak stoves, etc., is constantly increasing. They also give a list of sixteen leading stove manufacturers for whom they have made the designs, and patterns for this type of stoves.

RELACQUERING BRASSWORK.

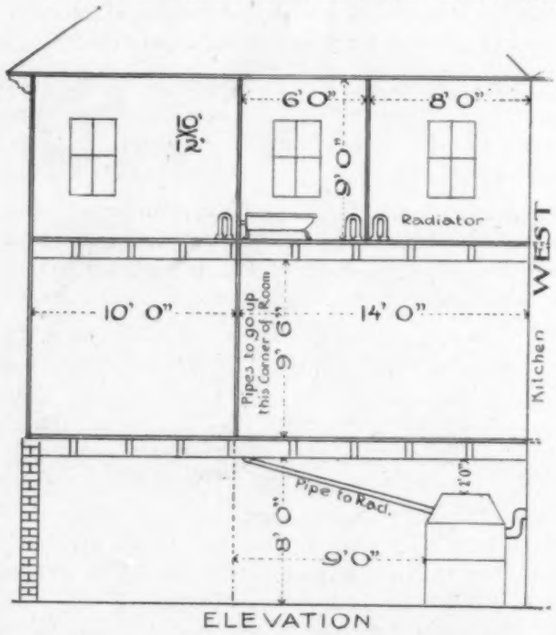
To relacquer old brasswork, first boil a strong lye of wood ashes, which you may strengthen with soap lees. Put in your brasswork, and the lacquer will immediately come off; then have ready a pickle of aquafortis and water strong enough to take off the dirt, dip in the article, and wash it immediately after in clean water; dry it well and lacquer it.—Ex.

Tinshop.

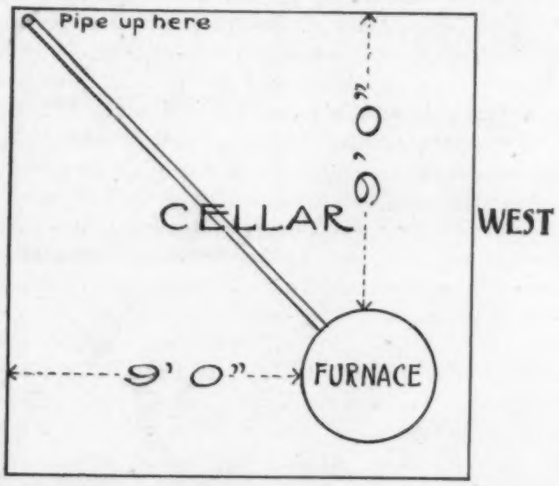
DESIRES SIZES OF RADIATORS FOR COMBINATION HEATING.

TO THE AMERICAN ARTISAN.

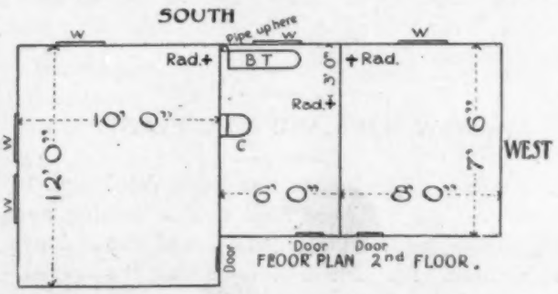
I enclose plans and elevation of three rooms on second floor I would like to heat with warm water



from furnace. I want to know size of radiators needed for each room, size of heater in furnace, size



of pipes, etc., and the best way to run them. Can I



supply hot water to bath tub and kitchen from same pipes, or would it be better to put in separate heater for that purpose. The radiators are located at points where they will have to go in the rooms.

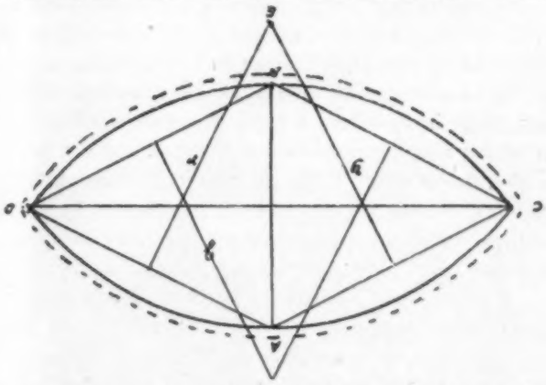
J. M. CADDY.

Kansas City, Mo., Sept. 23, 1901.

PATTERN FOR A METAL BALL.

The following is a method for obtaining a metal ball pattern:

Let the length C D represent half the circumference of the ball. Divide the circumference into as many pieces as you want. Let the length of A B be one of them, the center of which shall cross the center of C at right angles. Now draw the lines A C and A D B C and



B D, and from the center of each draw at right angles the lines G H I J until they meet at F and E. With your dividers at E draw arc C A and D; draw E C D same way—dotted line represents the edges. To have a true ball, cut some half circles of tin the size of the ball and tack them in the formed pieces that are to make the ball. These can be taken out after a few have been soldered together.

LISK'S TINWARE.

The Lisk Mfg. Co., Ltd., Canandaigua, New York, send us their September, 1901, catalogue of Lisk's high-grade, hand-made, pieced tinware, copper, copper nickel and aluminum galvanized ware. The line of goods shown in this volume include dairy and water pails, dairy strainer pails, iron clad dairy pails, sap pails, dinner pails, covered pails, cream pails, dippers, small water pails, wash boilers, coffee boilers, coffee pots, tea pots, measures, drinking cups, laid cans, tin spray pumps, copper spray pumps, pieced milk pans, sprinklers, round cake pans, square cake pans, stamped wash basins, stamped milk pans, stamped pudding pans, stamped pie tins, stamped sauce pans, stamped preserving kettles, stamped dish pans, seamless dippers, seamless cups, cream separators, stamped colanders, stamped funnels, stamped graters, O. K. safety stove pipe thimbles, galvanized pails, galvanized measures, galvanized dish pans, galvanized wash basins, galvanized oil cans, galvanized wash tubs, galvanized toilet ware, nickel plated copper tea kettles, nickel plated copper coffee pots, nickel plated and polished brass cuspidores.

Among the goods in this volume which have a wide vogue is Lisk's extra heavy No. 7 copper wash boiler No. 0302 size, with cold rolled planished sides and bottom, flat, weight with cover 7 lbs.

The Lisk's copper spray pumps, single spray and double spray, are made of heavy copper with extra heavy rod and plunger.

Lisk's round and square cake tins, with patent detachable bottom, are sold with recipes.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

DESIRES A NEW TINNERS' BOOK.

TO THE AMERICAN ARTISAN.

I believe a new tinners' book should be published which would tell how to lay out and cut the more common patterns that are used nearly every day, such as 2, 3, 4, 5 and 6-piece elbows at right angles; T joint collars of smaller sizes to connect to larger sizes, both at right angles and on different slants; bases for chimney stacks in 2, 3, and 4 pieces; caps for stacks, flare patterns; cones, steamer covers; obtuse angles; acute angles, gutter mitres; ball patterns, etc. Most of such patterns are cut by the majority of tinners by short methods which the ordinary apprentice could easily understand.

I think THE AMERICAN ARTISAN should make a request for short, simple methods of cutting, say just one pattern in each week's issue, same to be sent direct to your paper and not published. Your man (for I presume you must have some one to make those drawings) could look them over and later on publish a new book of those that suited or have them added to the present one.

CHAS. BANNON.

Joliet, Ill., Sept. 21, 1901.

NOTES AND QUERIES.

ELECTRIC LIGHT FIXTURES.

From C. I. Kindschi, Milwaukee, Wis.

Where can I buy electric light fixtures?

Ans.—Archer & Pancoast Co., 570 First av., New York; E. Baggot, 169 Adams st., Chicago; Bradley & Hubbard Mfg. Co., Meriden, Conn.; P. J. Buck Sons & Co., 8th and Willow, Philadelphia; Cassidy & Son Mfg. Co., 133 West Twenty-third st., New York; Cleveland Gas & Electric Fixture Co., Cleveland, O.; DeKosenko Mfg. Co., 804 Sansom st., Philadelphia; W. S. Edwards Mfg. Co., 21 East Lake st., Chicago; I. P. Finck, 551 Pearl st., New York; E. P. Gleason Electric Co., 20 West Houston st., New York; Horn & Braunen Mfg. Co., 427 North Broad st., Philadelphia; Iden & Co., 42 University place, New York; G. L. Reinhold, 8211 Cherry st., Philadelphia; Michigan Electric Co., Detroit, Mich.; Mitchell-Vance Co., 836 Broadway, New York; Mt. Washington Glass Co., New Bedford, Mass.; A. Schultz & Co., 1016 East Baltimore st., Baltimore, Md.; Thackara Mfg. Co., 1606 Chestnut st., Philadelphia; W. C. Vosburgh & Co., 281 State st., Brooklyn, N. Y.

CHAPIN'S PLANES.

From Mann & Co., Pierson, Ia.

Who makes Chapin's planes?

Ans.—H. Chapin's Sons Co., Pine Meadow, Conn.

ITEMS.

G. M. Hogue, a Davis City, Ia., tinner, is succeeded by Hogue & Martin.

It is said a new tin mining company is being formed at Detroit to exploit the old Harney Peak property.

Frederick Van Nortwick, Emanuel J. Lupin and Morris L. Zimmerman are the incorporators of the Penn Metal Co., Jersey City, N. J., capitalized at $750,000.

R. G. Gillespie, W. H. Skivington, D. R. Torrance, J. H. Paul and T. R. Ellison are the incorporators of the Carnegie Sheet Iron Co., Pittsburg, Pa., capitalized at $1,000.

It is said that W. H. Griffiths, who recently disposed of his holdings in the Washington Charcoal Iron and Tin Mills, Washington, Pa., to McClure & Co., Pittsburg, will shortly build a new tin mill at Washington.

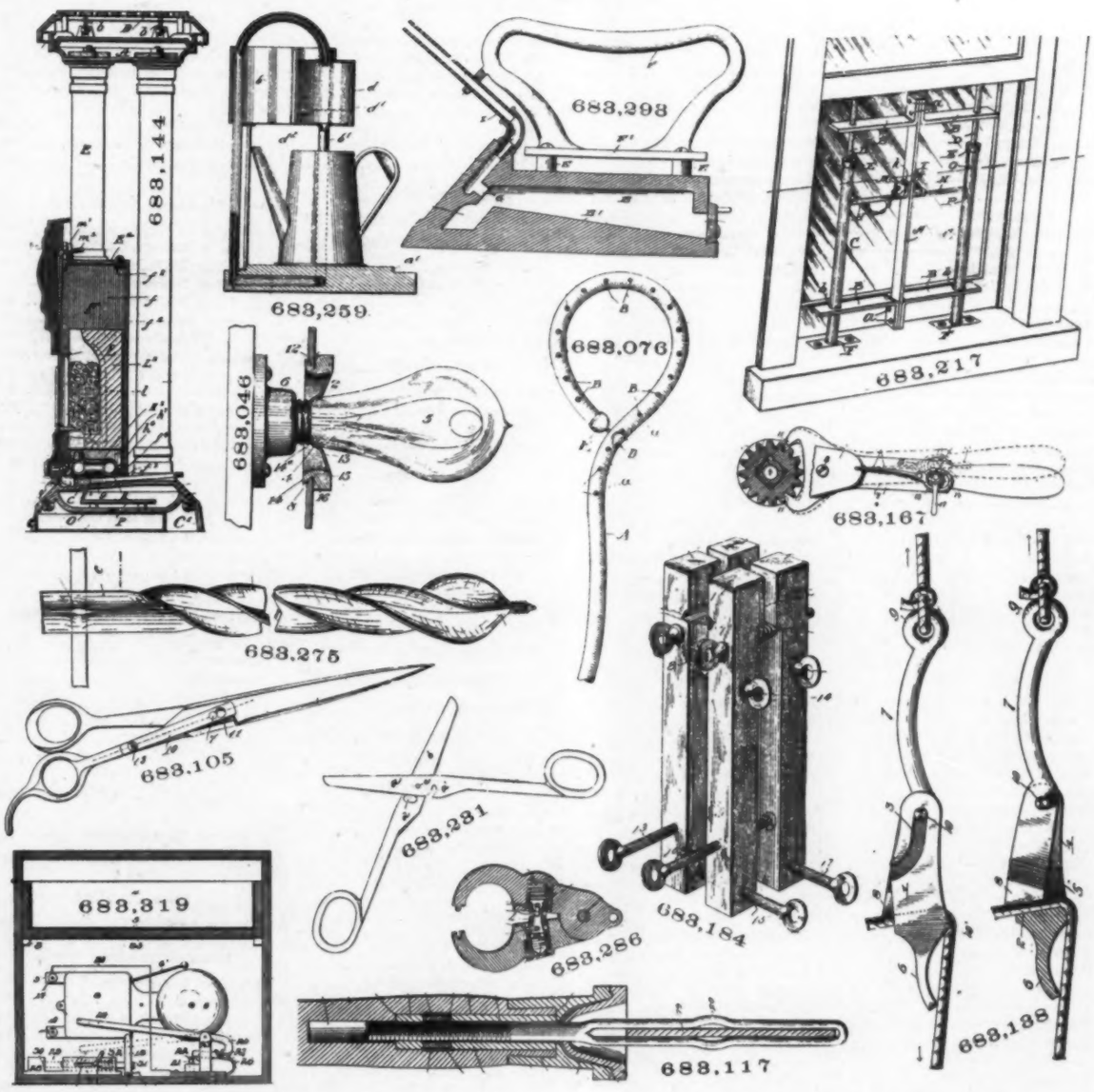
Bruce & Cook, 190 Water street, New York, are offering manufacturers of sheet iron air tights, stove pipe elbows, etc., a decided bargain in genuine Russia sheet iron, 28x56 inch size. Besides handling this iron in Nos. 7 to 12 in perfect sheets, they have an assortment of slightly stained sheets on hand which they divide into No. 1 stained, Nos. 7 to 10, No. 2 stained, Nos. 8 to 12, No. 4 stained, Nos. 8, 11 and 12. These stained sheets are mostly stained on one side only, and are well adapted for use in stove bodies, elbows, stove pipe, etc.

The La Crosse Steel Roofing & Corrugating Co., La Crosse, Wis., favor us with their attractive architectural sheet metal catalogue. The goods shown in this volume include galvanized steel fronts, lintel cornices, galvanized belt mouldings, cornice pediments, finials, window caps, ornamental galvanized iron ridgings, metallic cresting blocks, galvanized iron cresting, skylights, hipped wire and skylights, etc. A few of the features of Herringbone steel lath are its extreme rigidity, entire freedom from buckling, uniform even edges, and liberal measurement. This lath is self-furring. This firm warrant all their malleable iron crestings and finials, and if any are broken in transportation this firm will replace them. This firm are glad to fill all orders promptly and will make prices on special designs at any time. Their cornice work is of the highest class and all their work is made of the best galvanized sheets thoroughly riveted and soldered. One of these catalogues will be furnished the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

NEW WIRE AND NAIL PLANT.

A press dispatch from New York, dated Sept. 18, states that the Pittsburg Steel Co. are putting up a $1,500,000 plant for the manufacture of wire and nails at Monessen, Pa. The directors of this firm are Wallace H. Rowe, Emil Winter, John Bindley, W. C. Reitz and Willis F. McCook.

Patents.



683,217—Window guard. Frank B. Mower, Chicago, Ill.

683,167—Reversible ratchet. Lynchburg Adams, Santa Rosa, Cal.

683,076—Bath hose. William L. Simmons, Chicago, Ill.

683,138—Clothes line clamp. Georgia Park, New York, N. Y.

—Boring instrument for building or mining purposes. Emil Hartung, Muhlhausen, Germany.

683,184—Clamp. James P. Rockwell, East Windsor Hill, Conn.

683,117—Saw handle. Luther K. Haak, Luther, Mich.

683,319—Burglar alarm. William G. McClure, Beaverfalls, Pa.

—Padlock. Winfield S. Houser, Bellefonte, Pa.

683,105—Shears or scissors. Patrice Desnoyers, Magog, Canada.

683,231—Scissors. Cuno Stamm, Ohligs, Germany.

683,144—Gas heater. Edmond W. T. Richmond, Romford, England.

683,259—Coffee or tea making apparatus. Charles G. Durel and Louis P. Durel, New Orleans, La.

683,046—Incandescent lamp protector. John M. Howley, Bayonne, N. J.

683,293—Sad iron. Karl A. Kaiser, Long Island City, N. Y.

SHE COULDN'T SET IT.

"Our kitchen's cute," said young Mrs. Kidder, who had just started housekeeping, "but I'd like so much to get one of those new portable ranges."

"But, then," replied her wicked husband, "we'd have to get portable cooking utensils to go with it."

"That's so," said she disconsolately. "I never thought of that."—Philadelphia Press.

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FAMOUS CUTLERY.

The famous Zschille collection of cutlery, containing over a thousand pieces, and representing the handiwork of nearly every period of the world's history, was recently put up at auction in Paris. The sale lasted six days, and aggregated about £3,000. The period covered represented the work from the Stone Age down to the end of the eighteenth century, the various modifications and decorations of knives, forks and other instruments prevailing among the ruling races during the period covered being all represented. In modern days it is considered quite the proper thing to have a knife for each separate purpose, and the prevailing idea is that this is an innovation. As a matter of fact, however, even some of the knives formerly used have gone out of favor.

For instance, at one time it was considered a great honor to be elected to carve at dinner, and one much sought after by carvers of great reputation. The custom explains the fashion of the large, broad knife blades known as "couteaux de curee," or "presentoirs," upon which the carver, having selected the most delicate morsel, politely offers it to the noblest lady in the company. One of the oldest articles represented in the sale was an Egyptian spoon, said to be 3,000 years old, of carved wood, the handle resembling the figure of a woman swimming. There were hunting knives marvelously damascened. Thirteenth century Venetian knives, and knives with Dresden handles, ornamented with the coat of arms of famous families of history, and many pieces de maitrise, or workmanship credentials offered on entering corporations and guilds.—Ironmongers' Chronicle.

A USEFUL ALLOY.

To make an alloy which expands in cooling, melt together 9 pounds of lead, 2 pounds of antimony and 1 pound bismuth. This alloy may be used in fastening foundation belts for machinery into foundation stones. Collars, or heads, are left on the bolts, and after the hole is drilled in the stone, a couple of short, small holes are drilled at an angle to the big hole. When the metal is poured, it will flow around the bolts and also into these small holes, and it is nearly impossible for the bolt to pull out. When drilling holes into stone the water used should be carefully dried out by the use of red hot iron rods before the melted metal is poured in, in order to prevent accident by the blowing out of the metal and burning the hands and face of the workman.—Ex.

Trade Report.

BRADSTREET'S ON IRON AND STEEL SITUATION.

The editor of Bradstreets telegraphs us this advance report on the iron and steel situation:

The demand for iron and steel, repressed by strikes and for other causes, has at last broken the usual trade limits, and is full and free in nearly all lines.

Pig iron is active and in large sale and southern iron has again advanced in all markets. While the excessive premium on tinplates and other strike affected products has disappeared the demand is so large Pennsylvania mills have booked orders two to four months ahead and Chicago mills as far ahead as the end of 1902.

Billets are $1 higher; bars $2 up and a number of other products have advanced in proportion. Steel rails are in good demand, and so active has been the inquiry that the amount of old orders to be carried over for delivery next year is estimated at from 250,000 to 400,000 tons. Hardware sales are large, but galvanized iron is lower.

The situation in copper is not as yet clearly defined. Domestic consumption is large, but American prices are fully 3 cents higher than London.

WIRE NAILS.

There is a slight decline in the demand for wire nails, which are quoted at $2.45 in carload lots and $2.50 in smaller lots.

CUT NAILS.

Cut nails are in the same demand as they have been for some time past. Small lots are listed at $2.35.

BARB WIRE.

The phenomenal demand for barb wire is slackening somewhat. Painted barb wire is $2.75 in carload lots and $2.85 in smaller lots. Galvanized barb wire is $3.05 in carload and $3.15 in smaller lots.

STEEL GOODS.

Steel goods are in unsatisfactory shape.

SCYTHES.

At the recent meeting of scythe manufacturers prices were reduced about $1.75 to $2.00 per dozen.

ROPE.

Sisal is 8½c per lb. and Manila hemp is 9⅛ to 9¼c per lb.

WHITE LEAD IN OIL.

White lead in oil, in lots of 500 lbs. and over, is 6½c. In smaller lots it is 7c per lb.

LINSEED OIL.

The linseed oil market is quiet. City raw linseed oil is quoted at 65c to 66c per gallon.

SPIRITS TURPENTINE.

Turpentine prices are shaded ¼c as compared with last week. Southerns are 36¼ to 36¾c and machine made barrels are 36¾ to 37¼c per gallon.

COPPER.

The market is absolutely flat, consumers being frightened out by the many rumors afloat, the attacks upon the Copper shares stocks and the passing of extra dividends by the large producers. Lake was nominally 16½c, and electrolytic was nominally 16⅜c. This is the first decline reported since the report was published two weeks ago that the United Metals Selling Co. had 135,000,000 lbs. of copper in stock on hand. In the meantime, however, standard copper has gone down something more than £4 per ton in London, Rio Tintos have declined sharply in Europe, and in this country as well as in London, copper shares have declined many points, the stock of the Amalgamated alone being worth something like $40,000,000 less than it was two weeks ago.

TIN.

Tin is dull and weak at 25c. The Singapore quotation declined 17s 6d to £111 15s per ton, c. i. f. London. The Banka sale took place at Rotterdam, Sept. 26th. The market in London was weak and closed easy, spot tin declining 7s 6d and futures 17s 6d per ton.

LEAD.

Lead is dull but firm at 4⅜c per lb. in 50-ton lots. Exports were 400 tons from New York.

PLATES.

The plate market continues strong and tank plate of one-quarter inch and heavier continues to be quoted at $32 per ton. The demand for steel bars continues fair and the minimum price asked by all local producers is $30 per ton. Common iron bars are held at $29 to $30 per ton.

SPELTER.

Demand was very good and prices were firmer at 4.05c asked for spot. St. Louis reported a dull market, with the quotation unaltered at 3.80c. London also reported a dull market, the quotation being unchanged at £17 per ton.

SHEETS.

There is very little change to be noted. Nine-tenths of the business is being done from warehouses, and these stocks are rapidly diminishing. Prices vary, according to the size of order and shipment desired. We quote as follows: No. 27 black, 3.70c to 4c, and galvanized 65 per cent from store and 70 per cent from mill, Pittsburg.

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

			Per Box.
IC	10x14		$8 75
IX	10x14		10 50
IC	12x12		8 75
IX	12x12		10 50
IC	14x20		8 75
IX	14x20		10 75
IXX	14x20		11 75
IXXX	14x20		13 25
IXXXX	14x20		14 75
IC	20x28		17 00
IX	20x28		20 00
IXX	20x28		23 00

COKE PLATES.

Cokes, 180 lbs	IC	20x28	12 70
Cokes, 200 lbs	IC	20x28	13 00
Cokes, 216 lbs	IC	20x28	13 80
Cokes, 216 lbs	IX	20x28	15 25

PIG IRON.

Lake Sup. Charcoal	$17 50@$18 00
Local Coke Fdy No. 1	15 50@ 16 00
Local Coke Fdy No. 2	15 00@ 15 50
Local Coke Fdy No. 3	14 50@ 15 00
Local Scotch Fdy No. 1	15 50@ 16 00
Local Scotch Fdy No. 2	15 00@ 15 50
Local Scotch Fdy No. 3	14 50@ 15 00
Southern Coke No. 1	14 99@ 15 65
Southern Coke No. 2	14 40@ 15 15
Southern Coke No. 3	14 40@ 15 15
Southern Coke No. 4	14 15@ 14 65
Southern No. 1 Soft	15 65@ 16 00
Southern No. 2 Soft	15 15@ 15 65
Southern Silveries	15 45@ 15 50
Jackson Co. Silveries	17 00@ 17 50
Ohio Strong Softeners	16 50@ 17 00
Alabama Car Wheel	21 00@ 22 00
Malleable Bessemer	16 00@ 17 00
Coke Bessemer	17 50@ 18 50

BLACK SHEET STEEL.

¼ in. 3-16 in. Nos. 8 and 10	per lb.	$3 80
No. 12	per lb.	3 85
No. 14	per lb.	3 90
No. 16 and 18	per lb.	3 95
No. 20, 22, 24, 25 and 26	per lb.	3 90
No. 27	per lb.	4 00
No. 28	per lb.	4 18

SMOOTH STEEL.

		per lb.
Wood's Smooth Steel,	15-17	$4 00
" " "	18	4 10
" " "	20	4 20
" " "	22-24	4 30
" " "	25-26	4 40
" " "	27	4 50
" " "	28	4 60

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON.

Galvanized Iron 65%

SOLDER.

Extra 20½c

Commercial 19½c

SHEET ZINC.

600 lb. Casks, base ..... 7¼c per lb.

COPPER.

Copper ..... base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	28¼@28½c
Straits, pigs, per lb	28 @28¼c
Straits in bars, per lb	28¾@29 c

LEAD.

American Pig	4.60@4 62½c
	5½@¾

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name higher figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers and jobbers.)

ADZES—CARPENTERS'.

Hunt's	25%
White's	12½%
Coopers'—Barton's	12½%
White's	12½%
Ship—Barton's	12½%
White's	15%
Hunt's	25%

AGATE NICKEL STEEL WARE.

Agate Nickel Steel Ware ..... 33⅓&10%

AMMUNITION

CAPS, PERCUSSION—per 1000—

F L Waterproof, 1-10s	50c
G D	40c
Eley's	52c

CARTRIDGES.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&5%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal	10&10%
Peters Blank Ctgs. 32 cal	10&10%
Peters B B Caps, Round ball	$1 18
Peters B B Caps, Conical ball	$1 90
U. M. C. Rim Fire Ctgs	50&3%
U.M.C. Cent. Fire, Pistol & Rifle	25&3%
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. Blank Ctgs. 22 & 32 cal	10%
U. M. C. Blank Ctgs. 38 cal	50-10-10%
U. M. C. B B Caps, Round Ball	$1 75..25&10%
U .MC. B B Caps, Con. Ball	$2 00 net
U M. C. Rim Fire Shot Ctgs	50&15&3%
U. M. C. Cent. " " "	25&10&3%

PRIMERS.

Berdan Primers	$1 00
Peters Primers	1 10
U. M. C. Primers	1 08
Winchester Primers	1 08

SHELLS.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&5%
Peters Empty Paper Shells, 16 gauge. League	20&5%
Peters New Victor Nitro shells	15%
Ideal	33⅓&10%
Peters Loaded Shells. League and Semi Smokeless	40&5%
Peters New Victor Loaded Shells, with King's Smokeless	40&10&10%
Ideals Loaded with Kings Smokeless	40&10&10&5%
U. M. C. New Club, 16 guage	20&10%
U. M. C. New Club 10 & 12 gauge	33⅓&5%
U. M. C. New Club	33⅓&5%
U. M. C. Nitro	18%
U. M. C. High Base	18%
U. M. C. Trap	33⅓&10&7%
Winchester Blue Rivals / Winchester Yellow Rivals	20%
Winchester Repeater	18%
Winchester Leader	33⅓&10&7%
U. M. C. Loaded Shells. Black Powder / Winchester Loaded Shells, Black Powder	40&5%
U. M. C. / Winchester Smokeless	40&10&10&5%

GUN WADS—per 1000.

Peters Gun Wads	20&5%
U. M. C. Gun Wads	20&5%

POWDER.

King's Quickshot Powder; Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.

King's Semi-Smokeless	20&5%
King's Smokeless	25, 20 & 10
Austin Quickshot Powder, Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.	
Dupont Smokeless, Sporting	25, 20 & 10c.

SHOT.

Drop shot, sizes smaller than B, 25-lb bags, per bag	$1 35
Drop shot, B and larger sizes, 25-lb bags, per bag	1 00
Buck Shot, 25-lb bags, per bag	1 60
Chilled Shot, 25-lb bags, per bag	1 60

ANVILS.

Hay-Budden, 70 to 84 lbs	10c per lb
Hay-Budden, 85 to 150 lbs	9c per lb

AUGERS AND BITS.

Snell's Boring Mach. Augers	60&10&5%
Snell's Car Bits, 12-inch twist	40%
Jennings' Pattern Auger Bits	50&10%
Russell Jennings' Augers and Bits	25&10%
Ship Augers, L'Hommedieu Bits	15%
Irwin	50%
Climax Bits	60&10%

AWLS.

Brad, handled	per doz. $ 85
Brad, shouldered, assorted 1 to 4	per gr. 2 00
Brad, shouldered, assorted 1 to 6	per gr. 2 50
Peg, Pat	per gr. 60
Peg, shouldered	per gr. 1 00
No. 1, Scratch, handled	per gr. 4 80
No. 5, Scratch, socket	per doz. 6 00

AXES.

Lippincott	per doz	6 50
Mann	"	6 50
Second quality	"	6 00
Beveled axes, add	"	50
Broad—		
Peerless can patt	"	28 50
Hunt's	"	30
White's	"	12%
Hand—		
Hunt's	"	40
White's	"	12%
Ship—		
White's	"	12%

AXLES.

Common iron, long arm, sq. bed	5¼
Concord iron. long arm, sq. bed	6¼
Concord express, long arm, steel, square bed	6¼
Coach shape on above, ex. per. lb.	½
Short arms on above, extra per lb.	2
Welded axles on above, ex. per. lb	1½
Half Patent, steel, Nos. 7 to 14	70
Half Patent, steel, Nos. 19 to 22	70
Extra, coach shape, 1¼ & smaller	per set 15
Extra, coach shape, 1¼ 1½, per. set	30
Extra, coach shape, l'g'r, per. set	$1 00
National Wrought Steel Tubular, Self-Oiling—	
Standard Farm (1 to 5) and Special Farm (A1 to A5) less than ten sets	20%
Over ten sets	25

BEAMS—SCALE.

Scale Beams, List Jan. 12, 82	35%
Frary's	40%
P. S. & W.	30%

BELLOWS.

Blacksmiths	70%
Hand, 6½ in	per doz. $4 50
Molders', 10 in	per doz. 9 00

BELLS.

COW.

Ordinary Goods	70&10%
High Grade	60&10%
Jersey	75&10%
Texas Star	50&10%

DOOR.

Abbe's Gong	45%
Barton Gong	55%
Home, R. & E. Mfg. Co.'s	55&10%
Lever and Pull, Sargent's	20&10&10%

HAND.

Hand Bells, Polished	60@60&10%
White Metal	55@55&10%
Nickel Plated	50@50&10%
Swiss	60%
Silver Chime	33⅓@33⅓&10%

MISCELLANEOUS.

Farm Bells	lb. 2¼ to 2½c
Steel Alloy, Church and School	50&10&5@60%
Wilmot & Hobbs Mfg. Co., Gongs	70%

BIT STOCK DRILLS.

Standard List ..... 60@60&5%

BLOCKS

Common Wooden	70%
Eddy Steel Tackle Blocks	60⅔&5%

BOLTS.

CARRIAGE, MACHINE, ETC.

Common, list Jan. 30, 95	65%
Norway Iron, $3.00, list Oct. 7, '84	75&10%
Bolt Ends, list Jan. 30, '95	50&10%
Machine, list Sept. 20, '99	65&10%

DOOR AND SHUTTER.

Ives' Patent Door	60%
Wrought Barrel, Standard list	70&10%
Wrought Flush	40&10%
Wrought Square, Standard list	65%

STOVE AND PLOW.

Plow	40&10%
Stove, list December 28, 1899	70to70&10%

TIRE

Common, list Dec. 28, '99	70%
Eagle Philadelphia	72½%
Norway	75%

BORING MACHINES.

Jenning upright without Augers..$2 00

BOXWOOD RULES.

No. 4	$11 00	per doz
" 12	16 00	"
" 18	6 00	"
" 26	11 00	"
" 27	18 00	"
" 29	4 50	"
" 66	10 00	"
" 66½	10 00	"
" 67	6 00	"
Boxwood		80&10%
Ivory		40&10%
Lufkin's Steel		50&10%

BRACES.

Barber's	50&19%
Common Ball, American	$1 50
Fray's Genuine Spofford's	60%
Fray's No. 307 to 322	40&5%
Fray's No. 508 to 522	50%

BRACKETS.

Cast Iron Plain	50&10%
Wrought Steel	70&10 @ 75%
Bradley's	75 @ 75&10%

BROILERS.

Wire Goods Co 75%

BUTTS.

Bright Butts, Nos. 800, 802, 804, 806, 808, 810, 814, 816, 818, 820, 854	70%
Bright Butts, Nos. 826, 828, 829, 830, 832, 834, 836, 838, 840, 842, 843, 844, 845, 846, 848	70%
Bright Butts, Nos. 822, 822½, 823, 823½	70%
Japanned Butts, Nos. 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 726, 727, 728, 729, 730, 731	70%

CAGES—BIRD.

Enameled	40%
Brass 1200 series	33⅓%

CASTERS.

Bed	60&10&5%
Plate Casters	60&10&5%
Martin's Patent (Phoenix)	50&5%

CHAIN.

American Coil Chain, Less than Cask lots:

3-16	¼	5-16	⅜	7-16	½	9-16
8.40	6 30	5.25	4.35	4.20	4.10	4.05

⅝ ¾ ⅞ to 1
4.05 4.00 4.00c. per lb.

Less than Cask lots add 25c.

German Coil, list July 24, '97	60&10&10%
German Halter Chain, list July 24, '97	60&10&10%
Traces, Western Standard: 100 pair	
6½—6-3, Straight, with ring	$29.00
6½—6-2, Straight, with ring	30 00
6½—8-2. Straight, with ring	34.00
6½—10-2, Straight, with ring	37.50

Add 2c per pair for Hooks.
Twist Traces 2c. per pair higher than Straight Link.

Trace, Wagon and Fancy Chains Eastern list	50&10%
Jack Chain, lis July 10 '98	
Iron	60@60&
Brass	60@60&1

Safety Chain.....70&5@70&10%
Gal, Pump Chain.....lb. 4¼@4½c
Covert Sad. Works:
Breast, Hitching and Rein Chains.....70%
Covert Mfg, Co.:
Breast.....35&2%
Halter.....35&2%
Heel.....35&2%
Rein.....35&2%
Stallion.....35&2%
Oneida Community:
Eureka Coil & Halter40&10% new list
Niagara Coil and Halters40@10% "
Niagara Cow Ties..45&5@45&10&5%
Am, Coil and Halters..50&10&5@60%
Am. Cow Ties.....35&5@40&5%
Wire Goods Co.:
Dog Chain.....60&10%
Universal Dbl-Jointed Chain....50%

CHALK.

Blue.....per gross 60c
Red..... " 50c
White..... " 45c

CHALK LINES.

Chalk lines.....per doz. $2 50

CHISELS.

Mix..... } 70&5 to 70&10%
Witherby..... }

CHISELS.

Box.....20%
Tinners.....40%
Cold, per lb., regular qual.....20%
Cold, per lb., special qual.....32%
Corner.....66⅔%
Firmer, American..... 20, 10&10%
Barton's.....20%
Butcher's.....40&10%
Mortice, Butcher's.....40&10%
Socket, Firmer.....70%
Framing.....70%
Turning, Barton's.....20%
Butcher's.....50%
Beveled.....20%

CLAMPS.

No. 25 Adjustable.....50&10 to 60%
Carriage Makers..... 50&10&5%

CLEANERS.

Pot.....per doz $1 10

CLEAVERS.

Beatty's.....dis 40
White's..... " 15

CLIPPERS.

E. H. Hotchkiss Horse Clippers
No. 10.....per doz $18 00
No. 30..... " 15 60
No. 22..... " 13 80
No. 20..... " 18 20
No. 8..... " 10 80
H. Hotchkiss Toilet Clippers
No. 1.....per doz 9 60
No. 101..... " 10 80
No. 201..... " 10 80
No. 300..... " 13 20
No. 500..... " 15 00

COFFEE MILLS.

Enter. Mfg. Co., list Jan. 17, '93....25%
Parker's.....50&10%
Arcade..... 60&10%

CORKSCREWS.

Howes..... 25 & 22%
Humason & Beckley..... 40 & 10%
Empire..... 40%
Walker's..... net
Williamson's Regular..... 40%
Williamson's Forged Worm 40%

DOG COLLARS.

Pope & Stevens' List:
Brass (full Assortment).....net price

DOOR CHECKS.

Blount.....30%
Eclipse.....30%
Corbin.....30%

DRILLS AND DRILL STOCK.

Common Blacksmith's Drill
..... $1 50@$1 60
Bench Drills, Stearns'.....5 50& 6 00
Blacksmith's Self-feeding, each,
.....$5 00&$7 00
Breast, Millers Falls, each ..$3 00 20%
Godell Automatic Drills,$12 00to$15 00

EGG BEATERS.

Standard Co.:
No. 5 Steel Handle Dover per gross.....$ 6 50
No. 10 Cast Handle Dover pr gr 8 00
No. 10 Steel H'ndle Dov'r pr gr 8 00
No. 15 Extra Heavy Steel Handle per gr..... 15 00
Rival per gr..... 10 00
Taplin Mfg Co.:
No. 50 Small Family size pr gr 6 50
No. 100 Regular Fam size pr gr 8 00
No. 102 Regular Family size tinned pr gr..... 9 50
No. 150 Large Fam size pr gr.. 15 00
No. 152 Large Family size tinned pr gr..... 17 00
Lyon's Standard size per doz.. 1 75
Wonder (S. S. & Co.) per gr.... 7 50

ENAMELED WARE.

Peerless (L. & G. Mfg. Co.).....Net
Royal (N. E. & S. Co.).....Net

FASTENERS, BLIND.

Zimmerman's.....50&10%

FAUCETS.

Standard Metal Key.....25%
B. & L. B. Co.
Redlich's Wood Faucets.
Red Cedar.....
Oak.....
Cherry..... } Net Prices.
Cork Lined.....
Metal Key.....
Self Measuring:
Enterprise, per doz. $36 00.....40%
Cork Lined.....70&5@70&10&5%
Metallic Key, Leather Lined
.....70@70&10%
Red Cedar.....50@50&5%
B. & L. B. Co.:
West's Lock, Open and Shut Key.....50&10%
John Sommer's Peerless Tin Key..40%
" " Boss Tin Key.....50%
" " Victor Metal Key..50&10%
" " Duplex Metal Key....60%
" " Diamond Lock.....40%
" " I X L Cork Lined....50%
" " Reliable " " ..50&10%
" " Common " " 70%
" " Chicago " " 60%
" " O K " " 50%
" " Perfection Cedar.....40%
Star.....60@60&5%
Star, Metal Plug new list.... 40@40&5%
Lockport, Metal Plug, reduced list.....60&5%
McKenna, Brass:
Burglar Proof, N. P.....35%
Improved, ¾ and ⅞ inch.....35%
Self Measuring:
Enterprise, per doz $36.00.....40%
Lane's, per doz. $36.00.....40&10%
National Measuring, per doz $36.00.....40%

FILES—Domestic.

New List, Nov. 1, '99:
Black Diamond.....70&10%
Disston's.....75& 5%

Imported.

Stubs list.....5%

FORKS AND HOES.

Coke and Cottonseed Forks....40&5%
Coal Forks.....40&5%
Barn or Ice Forks.....40&5%
Beet Forks.....30&10
Ballast or Stone Forks.....40&5%
Tanners' Forks.....40&5%
Shaving Forks.....40&5%
Potato Scoop Forks.....40%
Oyster Forks.....40&5%
Sluice Forks.....40&5%
Heavy Mill, Manure or Street Forks.....70%
Steel Tar or Asphalt Rakes.....65%
Asphalt Hoes.....65%
Two Tine Hay Forks, Std. Size...65%
3 Tine Hay Forks, Std. Size..60&10⅔%
Four Tine Hay Fork, Std. Size..66⅔%
Socket Four Tine Hay Forks..66⅔&5%
Socket Four Tine Manure Forks...70%
Socket Four Tine Spading Forks
.....70&5&5&2½%
Three Tine Hay Header and Baler Forks.....67½&2½%
Four Tine Hay Header and Baler Forks.....66⅔%
Grain or Barley Forks.....70&6%
Four Tine Manure Forks.....70%
Five & Six Tine Manure Forks.....70%
Spading Forks.....70&2½%
Potato Digging Forks.....65%
Stone Picking Forks.....65%
Garden Hoes.....75%
Meadow and R. I. Hoes...75&5&2½%
Sunbeam Meadow Hoes.....75&5&½%
Mortar and Street Hoes.....75&2%
Planter Hoes, Regular Pattern.70&30%
Tobacco Hoes.....75&20%
Cotton Hoes.....70&10&10&5&2%
Rough Fin. Shank Cot. Hoes 75&12½%
Cotton Chopper Hoes....75&10&7½%
Ladies' Cotton Hoes.....75&10&7½%
Malleable Rakes.....70@70&10%
Toy Ladies' and Boys' Hoes.....70&10to70&10&5%
Weeding Hoesand Rakes...70@70&5%
Potato Hooks.....65to65&10%
Hop Hooks.....60&10&2½%
Steel Garden Rakes.....70&2%
Steel Garden Rakes Stamped blank 70%
Turf Edgers.....60&5%
Steel Road Rakes.....65%
Special Mortar Hoes.....40&10&2½%
Harpers' No. 7 Mortar Hoes.... ..65%
Truck Hoes.....50&10&2%
Hoes.....65%
Special Hoes.....75&10&2%
Hoe Down Hooks.....75&10&2%
Warren Hoes.....50&10&7½%
Laid Steel Edge Hoes.....25, 5&2%

GAUGES.

Marking, Mortise, etc.....60%
Stanley R. & L. Co.'s Butt & Rabbet Gauge.....Net
S. & H. Cos.....75%

GIMLETS.

Gimlets.....60%

GLASS CUTTERS

Woodward.....33⅓&10%
Red Devil.....33⅓&10%

GLUE POTS.

Tinned.....30%
Enameled.....35%

GLUE.

Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List

GREASE, AXLE.

Fraser's.....Ne
Baum's Castorine.....Net

GRINDSTONE FIXTURES.

Stowell's..... Net
Reading Hardware Co.....Net

HAMMERS.

"Artisan's Choice," A. E. Nail.40&10%
Engineer's and B. S. Hand.....60%
Machinist's Hammers.....60%
Bell Face, A. E. Nail.....50
S. & H. Cos. No. 20 ....per gross. 5 25

HANDLES—IRON, WROUGHT OR CAST—DOOR OR THUMB.

No. 0.....per doz $0 90 } Discount
No. 1..... " 1 00
No. 2..... " 1 18
No. 3..... " 1 35
No. 4..... " 1 50
Bronze Iron drop lat., per doz net $1 10
Japanned store door.....net 1 10
Barn door No. 5..... " 1 35
Chest and lift.....dis 50
Wood—
Saw and plane..... " 45
Hammer, hatchet, axe, etc.... " 45
Brad awl.....per gro. 45
Hickory firmer chisel.....
Apple firmer chisel..... } ..25
Socket firmer chisel.....
Socket framing chisel,.....
File.....per gro. $2 80
Auger, assorted..... 5 00
Hoe, rake, shovel, etc..... 50
Cross Cut Saw—
Atkins' No. 1.....per pair 28
" No. 3..... " 18
" No. 6..... " 12
Triumph..... " 12
Common loop..... " 10

HANGERS.

Chicago Spring Butt Co.:
Friction.....25%
Oscillating.....25%
Big Twin.....25%
Cronk Hanger Co.:
Loose Axle.....60%
Roller Bearing.....60&10%
Lane Bros.:
Parlor, Ball Bearing $4.00
Parlor, Standard 3.25
Parlor, New Model 2.75
Parlor, New Champion..... 2.40
Barn Door, Standard .....60&10%
Covered .....50&10&10&5%
Special .....60&10%
Lawrence Bros.:
Advance.....60%
Cleveland .....60&10%
Crown.....60%
New York.....60%
Peerless .....60&10%
Sterling 60%
McKinney Mfg. Co.:
No. 2, Standard, $18.....60&10%
No. 1, Special, $13.....60&10%
Stowell Mfg. and Foundry Co.:
Acme Parlor Ball Bearing 40%
Atlas.....50&10%
Badger Barn Door.....50%
Baggage Car Door.....50%
Climax Anti-Friction.....50%
Elevator 40%
Express.....50%
Interstate .....50&10%
Lundy Parlor Door.....50%
Matchless.....50&10%
Nansen.....60&10%
Stowell Parlor Door 50%
Railroad 50%
Street Car Door.....50%
Steel, Nos. 300, 404, 500.....40&15%
Wild West.....50%
Zenith for Wood Track 50%
Taylor & Boggis Foundry Co.:
Kidder's .....50@50&10%
Wilcox Mfg. Co :
Bike Roller Bearing .....60&10%
C. J. Roller Bearing.....60&10%
Cycle Ball Bearing.....50%
Dwarf Ball Bearing.....40%
Ives, Wood Track.....60&10%
L. T Roller Bearing.....60&10&5%
New Era Roller Bearing .....50&10%
O. K. Roller Bearing.....60&10&5%
Prindle, Wood Track 60%
Richards' Wood Track 60%
Richards' Steel Track .....50&10%
Spencer Roller Bearing.....60&10%
Tandems, Nos. 1 and 2.....60%
Underwriters' Roller Bearing....40%
Wilcox Auditorium Ball Bearing 20%
Wilcox Barn Trolley No. 123 ....40%
Wilcox Fire Trolley, Roller Bearing 30%
Wilcox Le Roy Noiseless Ball Bearing 40%
Wilcox New Century ....50&10&10%
Wilcox Trolley Ball Bearing.....40%

HATCHETS.

American Axe and Tool Co..... } 40&10%to40&10&5%
Blood's.....
Hunt's.....
Hurd's.....
Mann's.....
Underhill's.....
C. Hammond & Son..
Fayette R. Plumb....

HAY AND STRAW KNIVES.

Lightning.....$6 50&$7 00

HINGES.

BLIND AND SHUTTER.

Surface Gravity Locking Blind:
(Victor; National; 1868 O.P.; Niagara; Clark's O. P.; Clark's Tip; Buffalo.)
No.....1 3 5
Doz pair.....$0.75 1.45 2.90
Mortise Shutter:
(L. & P., O. S., Dixie. &c.)
No.....1 1½ 2 2½
Doz. pair.....$0.60 55 52 45
Mortise Reversible Shutter, (Buffalo, &c.)
No.....1 1½ 2
Doz. pair.....$0.65 .60 .55
Parker.....70@75%
North's Automatic Blind Fixtures, No 2, for Wood $9.00; No. 3, for Brick $11.50.....10%
Reading's Gravity.....75&10%
Sargent's, No. 1, 3, 5.....66⅔&10%
Sargent's. Nos. 11 & 13.....70&10%
Wrightsville H'dware Co.:
O. S., Lull & Porter.....80&2½%
Acme, Lull & Porter.....75&10%
Queen City Reversible.....75&10%
Stenger's Positive Locking, Nos 1 & 3.....70&10&5%
Shepard's Noiseless, Nos. 60, 65, 55 79&10%
Niagara, Gravity Locking, Nos. 1, 3 & 5.....75&7½%
1868, Old Pat'n. Nos. 1, 3 & 5 75&7½%
Tip Pat'n, Nos. 1, 3 & 5.....75&7½%
Buff. Gravity Lock., 1, 3, 5..75&7½%
Shepard's Double Locking, Nos. 20 & 25.....70&10%
Champion Gravity Locking, No 75 75&7½%
Steamboat Gravity Locking, No 10 5&7½%
Pioneer, Nos 060, 45 & 5½..75&7½%
Empire, Nos 101 & 103.....70&7½%
W. H. Co's Mortise Gravity Locking No. 2.....60&10%
Stanley's Steel GravityBlind Hinges, per doz. sets $1.30.....30&10%

GATE.

Clark's or Shepard's—Doz. sets:
No.....1 2
Hinges with Latches $1.50 2.50

Hinges only..... 1.30 1.90 2.90
Latches only..... 65 65 95
New England:
With Latch.....doz....@$1.55
Without Latch.....doz....@$1.25
Reversible Self-Closing:
With Latch.....doz....@$1.80
Without Latch.....doz ...@$1.45
Western:
With Latch.....doz. $1.40@1.75
Without Latch.....doz. $0.95@1.30
Wrightsville H'dware Co.:
Shepard's or Clark's Nos. 1 & 2....
65&2½%
Shepard's or Clark's, No. 3....55&5%

SPRING

Holdback, Cast Iron, gros. $8.00@8.25
Non-Holdback, Cast Iron.... ....
gro. $6.75@7.25
Extra 10% often given on most of these hinges.
J. Bardsley:
Bardsley's Patent Checking.....15%
Bommer Bros.:
Bommer Spring Hinges 40%
Bommer Ball Bear. Floor Hinges.40%
Chicago Spring Butt Co.:
Chicago..... .....20%
Floor Hinge.....40%
Garden City Engine House.....20%
Keene's Saloon Door 20%
Triple End.....40c
Hoffman Hinge & Foundry Co.:
No. 70 & 80 Holdback Detachable
$8.50
Lawson Mfg. Co.:
Matchless 30%
Matches Pivot.....25%
Payson Mfg. Co.:
Oblique.....50&10%
Stover Mfg. Co.:
Ideal, No. 16, Detachable, per gr.
$12.50
Ideal, No. 4.....per gr. $9.00
New Idea No 1.....per gr. $9.00
New Idea, Double Acting.....45%

WROUGHT IRON

Strapand T Hinges, list Mar. 15, 1901:
Light Strap Hinges.....75%
Heavy Strap Hinges.....80%
Light T Hinges.....70%
Heavy T Hinges.....66⅔%
Extra Heavy Hinges.....75&10%
Hinge Hasps..... .....60%
Cor, Heavy Strap.....80%
Cor, Ex. Heavy T.....75&10%
Screw Hook and Strap:
6 to 12 in.....lb. 3¼c
14 to 20 in.....lb. 3¼c
22 to 36 in.....lb. 3 c
Screw Hook and Eye:
¾ to 1 inch.....lb. 5c
⅝-inch.....lb. 6c
½-inch..... .....lb. 7c

MISCELLANEOUS—

Hoffman's Steel Spring Butt Hinges
40&10%
Hoffman's OffsetRefrigeratorHinges
40&10%

HOLLOWWARE.

Stove Hollowware Ground.....50%
Maslin Kettles.....70&10%

HOOKS.

Picture, No. 290 ....&28c

BUSH HOOK.

No. 1, Underhill $9 00
Bird cage 40%
Clothes line .....60&10&10%
Grapling.....50%
Ceiling.....60&5%
Coat and Hat .....60&5%
Harness .....60&10&10%

WROUGHT IRON.

Cotton, V. & B.....25%
Tassel and picture.....50%
Wire, Coat and Hat, Gem.....net
Indestructible.....45%
Brass .....net $2 0%
Hooks and eyes, bright wire....80&10%
Brass.....60&10&5
Fish hooks, American.....50%

HOSE—RUBBER.

Competition.....dis 70&10%
Standard 70%
Extra 60%
N. Y. Rubber Co.'s st'd.....50&10%
Banner.....60%
Extra..... 50%

IRONS—SAD AND POLISHING.

Mrs. Potts' No. 50.....70c
Mrs. Potts' No. 55.....70c
Mrs. Potts' No. 60.....90c
Mrs. Potts' No. 65..... 55c

KNIVES.

Standard List.....70&5%
Adjustable Handle.....25@33⅓%
Watrous.....30&10@40%
Cantelo's Folding.....25%
Improved Crown.....20%

KNOBS.

Base, 2¼in. Birch Rubber tip ℔
gro.....$1 40
Door, Mineral.....℔ doz. 65c
Door, Por. Jap'd.....℔ doz. 75c

LADLES.

Reading.....Net
Sargent's.....Net

LANTERNS—TUBULAR.

No. 0 Berger's "Bail Lift," per
doz. $9 50.....40&10%
No. 0, Berger's "Bail Lift,"
Galvanized, per doz. $10 50...40&10%
No. 2 Berger's "Bail Lift," per
doz. $13 00.. .....40&10%
No. 2 Berger's "Cold Blast," per
doz. $16 00.....40&10%
No. 0 Berger's Dash Board, Japanned, Plain Globe, per doz.
$13 00.....40&10%
No. 0, Berger's Dash Board, Japanned, Bull's Eye, per doz.
$13 50 .....40&10%
No. 2, Berger's Dash Board, Japanned, Plain Globe, per doz.
$17 00 .....40&10%
No. 2, Berger's Dash Board, Japanned, Bull's Eye, per doz.
$17 50.....40&10%

BULL'S EYE POLICE.

2¼-in. flash light, per doz. $3 50@$3 75
3-in. flash light, per doz....4 00@ 4 25
4¾-in. regular, per doz.....3 50
3-in. regular, per doz.....3 57

LEMON SQUEEZERS.

Wood, Common, per gr., No. 0 $5 00; No. 1 $6 50; No. 2 $10 00.

Wood, Porcelain lined, No.
1.....per doz. $3 00@$3 50
Tinned Iron.....per doz. 1 25
Iron, Porcelain Lined, per
doz.....3 25@ 3 50
Jenning's Star...per doz. 1 85@ 1 90
King.....per doz.

LOCKS.

Plate 33⅓%
Slaymaker-Barry Co..... 30&25%
Sargent & Co..... .....40, 40&10%
Yale flat key.....net
L. & C, round key.....30&10%
Reading Harding Co.....40%
L. & C. flat key latches .....33&10%
Stearns' sliding door....net $15 00

CABINET.

Eagle.....33⅓%
Yale.....33⅓%
Eagle and Corbin trunk.....25%

PADLOCKS.

Wilcock's..... 70%
M. W. & Co..... 70%
Russell & Irwin 70%
Slaymaker Barry Co..... 40%
Bohannon's brass..... 30%
Yale.....net
Eagle 33⅓%
Eureka, Eagle Lock Co 40%
Corbin.....33⅓&10%

MALLETS.

Fiber Head Sterns.....30&10%
Hickory.....40%
Lignumvitæ .....40&40&10%
Tinners'. Hickory and Applewood, per doz. .....75c@$1 50

MATTOCKS.

Regular list.....70%

MOWERS, LAWN.

Cheap.....all sizes, $2 00@$2 10
Good.....all sizes, $2 50@$2 75
10 12 14 16-in
High Grade....4.25 4.50 4.75 5.00
Pennsylvania and Continental
.....Net price
Genuine Philadelphia Mowers:
Styles M. S., C., K., T.....70&10%
Style A, (all steel).....60&10%
Style E, Low Wheel.....60&10%
Style E., High Wheel.....70&10&5%
Drexel, low list.....60%
Gold Coins, low list.....60%
Dewey's.....Net prices
All Day .....Net prices

NAIL PULLERS.

Giant, No. 1..... per doz., $18 00. 40%
" No. 1½.... " 16 00. 40%
" No. 2..... 15 00. 40%

Ajax.....Net prices.
Diamond B.....per doz., $ 9 00
Pipe.....per doz., 12 00
Eureka.....per doz., 10 00

NAIL SETS.

Octagon..... per gross, $8 00@$9 00
Round..... per gross, 8 00@ 9 00
Cannon's Diamond Point, per
gross .....$9 00 Net

NUT CRACKERS.

Sargent's No. 12.....$1 50

OILERS.

Tin or Steel.....50%
Zinc..... 50&10&5 to 60%
Malleable Hammers 35%
Malleable Hammers, old pat.,
same list .....Net

PADLOCKS.

Sargent Dog Collar 70%
Sargent Wrought Steel and Brass..80%

PINCHERS.

Carpenters', wrt. iron, pol.
steel jaws..... 25
Blacksmiths'..... 40
P. S. & W..... 25

PIPE.

WROUGHT.

List February, 1898.
1¼ and under, plain.....50&2½%
1¼ and under, gal.....50&2½%
1½ and over, plain.....50&2½%
1½ and over, gal.....50&2½%
Boiler tubes.....50&2½%

PLANES.

Stanley Planes, No. 100.....$.30 each
" " No. 130..... .25 each

PLIERS AND NIPPERS.

Swedish Side Cutting Pliers 40%
" End " " 40%
" Diagonal " " 40%
Halls Compound Nippers.....40%
U. D. F. & T. Co., all kinds.....Net

PLUMBS AND LEVELS.

Common.....75 to 75&5%
Disston's.....60%

POACHERS.

Buffalo Steam Egg No. 1, per doz.
.....$7 20. 50%

POLISH.

POLISH—METAL.

U. S. Metal Polish Paste, 3 oz.
boxes, per dozen, 50c; per gr.
$4.50; ½lb boxes, per doz. $1.25;
1 lb boxes, per doz.....$ 2 25
U. S. Liquid, 8 oz. cans, per doz.
$1.25; per gr..... 12 00
Barkeepers' Friend Metal Polish, per doz. $1.75, per gr..... 18 00
Universal Paste, 3 oz. boxes.....60%
Burnishine Liquid 5 lb..... 16 00

POLISH—STOVE.

Dixon's .....per gross, $5 75
Dixon's Plumbago.....per lb 6½c

POPPERS, CORN.

Round or Square, 1 qt....per doz., 65%
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 00

POST HOLE AUGERS AND DIGGERS.

Iwan's Patent Post Hole Auger....40%
Eureka Perfection Post Hole
Digger, per doz.....$10 00
Atlas, per doz..... .... 8 25

POWDER.

IN CANISTERS.

Duck, 1 lb each.....45c
Fine Sporting, 1 lb each.....75c
Rifle, 1 lb each..... .....$1 00

IN KEGS.

Duck, 6½ lb kegs.....$2 50
Rifle, 6½ lb kegs..... ..... 1 25
Rifle, 12½ lb kegs..... 2 25
Rifle, 25 lb kegs..... ..... 4 00

PRESSES — FRUIT AND JELLY

Enterprise Manufacturing Co.....25%

PULLEYS.

Hay Fork, Svl, Sd Eye, doz $1 75@$2 75
Hot House, Awning, etc.....50%
Japanned Clothes Line.....50%
Japanned Screw.....50&10%
Japanned Side..... .....50&10%
Sash (Auger Mortise):
Common Sense, 1¾ in ..per doz. 19c
Common Sense, 2 in . per doz. 30c
Empire.... ....17c.; 2 in., 22c

SASH PULLEYS.

Fox No. 3 or No. 7, 2¼ wheel,
.....25c per doz
Fox No. 9, 1¾ wheel.....20c per doz
Extra for plated Finish.... 25c per doz
Extra for Anti-Friction Bronze
Bushing.....10c per doz

RAZORS.

Fox Razors No. 42....per doz. $20
" " " 44.... " " 24 00
" " " 82..Platina " 24 00
Discount 40%
Rantankarus..... " 16 00

REGISTERS.

List Sept. 1, 1901.

Black Japanned Registers, Ventilators, Faces and Borders,
.....70%
White Japanned Registers, Ventilators and Faces.... ... .70%
Bronzed Finishes in Imitation of Gold, Silver, Copper or Bronze
.....70%
Nickelplated..... ... .70%
Electro-Plated in Brass, Bronze, Copper or Oxidized Silver.....70%
White Porcelain.....60%
Solid Brass and Bronze Metal.....50%

RIVETS AND BURRS.

Coppered Iron Rivets.....60&5%
Tinners Rivets.....60&5%

ROOFING SUPPLIES.

EAVE TROUGH.

"Perfection" Galvanized Eave
Trough.....75&10%
"Eclipse" Galvanized Eave
Trough.....75&10%
Double Bead Galvanized Slip
Joint Eave Trough.....75&10%
Double Bead Galvanized Lap
Joint Eave Trough.....75&10%

GUTTERS.

Roof Gutters, Galvanized.....75&10%

PIPE.

Plain Round Pipe, Galvanized,
Nested.....60&20&2½%
Plain Round Pipe, Galvanized,
Unnested.....60&20%

VALLEYS.

Valleys, in Rolls, IC and IX Terne.70%
Valleys, in Sheets, IC and IX
Terne.....70%

HOOKS.

Flashing Hooks.....10%
Wrought Conductor Hooks.....60%

CUT-OFFS.

Kuehn's Galv.....60%
Acme Galv..... 10&10%
Acme Tin.....60&10%
Centennial Tin.....20%

EAVE TROUGH HANGERS.

Eave Trough Hangers, Single
and Double Bead, Imperial.....10%
Eave Trough Hangers, Single
and Double Bead, Wire.....

ELBOWS.

One Piece Conductor Elbows,
Galvanized, Corrugated..... 60%
Adjustable Elbows, Tin. 50%

PREPARED ROOFINGS.

Imperial 2-ply Tarred Roofing
complete.....$1 75 per sq.
Imperial 3-ply Tarred Roofing,
complete.....$2 00 per sq.

ROPE.

Per lb
Manilla, 7-16 inch diameter and
larger.....9½@10c " "
Manila, ⅜ in.....9¾@9¾c " "
Manila, ¼ and 5-16 in.....
10½@10½c "
Sisal 7-16 in. and larger 7@7¼c "
Sisal, ⅜ inch ..... 8@8¼c "
Sisal, ¼ and 5-16 in.....8@8¼c "
Sisal, Medium Lath Yarn ....
9@9¼c "

SASH CORD.

Braided, Drab.....lb 25c
Braided, White common..lb 17½@18c
Cable Laid Italian ....lb, A 18c, B 16c
Common India.....lb 9c@9½c
Cotton Sash Cord, twisted....12@16c
Patent Russia..... ....lb 12½@13c
Cable Laid Russia.. .....lb 13½@14c
India Hemp, braided.....lb 14@15c
India Hemp, twisted.....lb 10@12c
Patent India, twisted .....lb 10@12c
Pearl Braided, cotton .....lb 17@18c
Massachusetts, white.... ....lb 23½c
Massachusetts, drab..... lb 20½c
Eddystone Braided, cotton ....lb 19c
Harmony Cable Laid Italian....lb 18c
Ossawan Mills:
Crown, Solid Braided, white ..lb 18c
Braided, Giant, white.. .....lb 17c
Peerless:
Cable Laid Italian.....16c
Cable Laid Russian.....14c
Cable Laid India..... 12c
Braided India.....18c
Phœnix, white.....19c
Samson:
Braided, Drab Cotton .....lb 32½c
Braided Italian Hemp.. ....lb 32½c
Braided. Linen..... .....lb 49c
Braided, White Cotton, Spot.lb.28½c
Silver Lake:
A quality, Drab, 40c..... .....15%
A quality, White, 35c..... .....15%
B quality, Drab, 35c.....15%
B quality, White, 30c.... .....15%
Italian Hemp, 40c... .....15%
Linen, 57½c.....15%

SASH LOCKS.

Ives, Patent.....60@60&5%
Payson's Perfect..... .....Net
Payson's Signal (new list).....Net

SAWS.

Atkins' Circular.....Net
Atkins' Band.....Net
Atkins' Cross Cuts.....Net
Atkins' Mulay, Mill and Drag.....40%
Atkins' One-Man Saw.....Net
Atkins' Circular Solid and Inserted Tooth.....50%
Atkins' Bands over 2 in. wide.....60%
Atkins' Bands under 2 in. wide.57&10%
Atkins' Mill, Mulay and Drag.... 50%
Atkins' Cross Cuts..... 40%
Atkins' One Man.....40&10%
Atkins' Narrow Cross Cuts.....40%
Atkins' Wood Saws and Blades.40&10%
Atkins' Hand Saws.....40%
Atkins' Compass Saws.....50%
Atkins' Butcher Saws.....40&10%
Disston Circular Solid and Inserted Tooth.....50%
Disston Cross Cuts.....Net
Disston Narrow Cross Cuts.....Net
Disston, Mulay, Mill and Drag....40%
Disston Framed Woodsaws.....35%
Disston Woodsaw Blades.....40%
Disston Woodsaw Rods.....25%
Disston Handsaws, Nos. 12, 99, 9, 16, D100, D8, 120, 76, 77, 8.....25%
Disston Hand Saws, Nos. 7, 3.....30%
Disston Compass, Keyhole, etc....25%
Disston Butcher Saws and Blades.35%

SAW FILERS

Stearns' 25%
Silent saw.... .....35%
Sargent's..... .....60&30%
Reading..... .....37½%

SCALES.

Family, Turnbull's .....30@30&10%
Hatch, Counter:
Platform, 4 lb. by ¼ oz..doz...$5.75
2 Platforms, 8 lb. by ¼ oz. doz $16 00
Union Platform, Plain.....$1.75@$2.00
Union Platform, Striped.. $1.85@$2 15
Chatillon's Eureka.....25%
Chattilon's Favorite.....40%
Chatillon's Grocers' Trip Scales...50%
Pelouze Scales, Household Counter, Confect. Postal, Ice, &c.....50%
"The Standard" Portables.....45%
The Standard" R. R. and Wagon 50%

SCREWS.

BENCH AND HAND.

Bench, Iron.....per doz. 60%
Bench, Wood, Beech..per doz. $3 50
Hand, Wood.....30%

COACH, LAG AND HAND RAIL.

Coach and Lag, Gimlet Point, list Sept. 20, 1899.....75@75&10%
Hand Rail, list Jan. 1, 1871..... ..75%

JACK SCREWS.

ack Screws.....70%

WOOD.

MANUFACTURERS' CIRCULAR PRICES

New List.
Flat Head Iron.....27½%
Round and Oval Head Iron.....80%
Flat Head Brass.....85%
Round and Oval Head Brass.....82½%
Flat Head Japanned.....82½%

SCYTHES.

Blood's.....$ 8 50
Clover..... .... 8 50
Grain Clipper, Blood's..... 10 50
Hollow Clip.... .... 8 50
Silver Clip 8 50
Honest Dutchman.... ..... 8 50

SHEARS.

	7	8	9 in.
Best.....	$16.00	$18.00	$20.00 gro.
Good.....	13.00	15.00	17.00 gro
Cheap....	5.00	6.00	7.00 gro.

Straight Trimmers, &c.:
Best Quality Jap.....70@70&10%
" Nickel.....60@60&10%
Fair qual. Jap..... 80@80&5%
" Nickel .....75@75&10%
Tailors' Shears.....40@40&10%
Acme Cast Shears.....40@40&5%
Heinisch's Tailors' Shears. 40@40&5%
Wilkinson's Hedge 50%
Wilkinson's Sheep.....1900 list, 50%

SHINGLES, METALLIC.

Eastlake I. C. Tin Shingles, painted, pr sq.....$4 25
Eastlake I. C. Tin Shingles, galvanized, pr square.....$6 00
Octagon Fluted I. C. Tin Shingles, painted, per square..$5 50
Octagon Fluted I. C. Tin Shingles, galvanized. pr sq....$7 25

SIFTERS.

Eclipse.....per gr $15 00
Hunter's Genuine.....per gr $16 00

SKATE SHARPENERS.

Skate Sharp., Eureka, per doz $2 00 net
Washer Cutters, Woodard's, per doz.....$2 50 net

SLATE.

GENUINE NO. 1 BANGOR.

24x14, 24x12, 12x 8 } $3 50 pr sq. — 20x10, 18x10, 18x 9, 16x 8 } $4 50 pr sq
22x11, 20x12, 18x12, 16x12, 14x10, 14x 8, 14x 7 } $3 75 per sq. — 16x10, 16x 9 } $4 25 pr sq; 12x 7, 12x 6 } $3 25 pr sq

GENUINE NO. 1 BANGOR RIBBON.

24x14, 24x12 } $3 00 pr sq. — 20x10, 18x10, 18x 9 } $3 50 pr sq
22x11, 20x12, 14x 8, 14x 7 } $3 25 pr sq. — 16x10, 16x 8

SNAPS.

German.....40@40&10%
Covert Mfg. Co.:
Derby.....35&2%
High Grade .....45@2%
Jockey.....40&2%
Trojan .....45&2%
Yankee.....35&2%
Yankee, Roller.....30&2%
Covert's Saddlery Works:
Banner.....60&10%
Crown..... .....60&10%
Model ....60&10%
Triumph .....60&10%
W. & E. T. Fitch Co.:
Bristol .....40&10%
Empire.....50&5%
German 40%
National .....50&5%
Perfect... .....45%
Clipper.....50&5%
Champion.....40%
Security.....40%
Victor.....60&5%
Oneida Community:
Solid Steel..... .....65@65&10%
Solid Swivel.....65&10@65&10&10%
Sargent's Patent Guarded...66⅔&10%

SOLDERING FURNACES.

No. 3 Gems tin reservoir.....$6 00
No. 6 Gems copper reservoir..... 8 50
Gem Gas Pots..... 3 25
Clayton & Lambert No.1 Fire-Pot 6 00
Clayton & Lambert's Special Fire-Pot..... 4 50

SPRINGS, DOOR.

Star (Coil) list Oct. '95.....net
Torrey's Rod 39 in. Per doz .... $1 20@$1 25
Warner's No. 1..... .....net 75

SQUARES.

Steel and iron..... ..... 70&10%
Nickel plated..... 65, 10&5%
Try squares and bevels..... 65, 10&5%
Disston's..... 45%
Bemis and Call, pocket.....30%
Winterbottom's try & mitre..... 30%
Starrett's..... .....25%

STAPLES.

Barbed Blind .....per lb., 10c
Poultry Netting.....per lb., 5c

STAPLE PULLERS.

Russell Staple Pullers..per doz., $9 00

STOVE PUTTY.

1, 10 & 25 pound Cans.....per lb., 5c
500 pound Kegs.....per lb., 4½c

STROPS.

RAZOR.

Emerson.....60 to 60&5%
Imitation.....20, 10&5%
Torrey's.... ....20%
Tower & Lamont.....per doz $4 00
04 Combination.....per doz 3 75

TACKS.

List Jan. 15, '99.
Carpet Tacks, American.....90&40%
American Cut Tacks.....90&20%
Swedes Iron Tacks.....90&40%
Swedes Upholsterers' Tacks..... .....90&40&10%
Gimp Tacks ....90&40&10%
Lace Tacks .....90&40&10%
Trimmers' Tacks.....90&20%
Looking Glass Tacks .....70&10%
Bill Posters' and Railroad Tack90&40%
Hungarian Nails.....80&15%
Common and Patent Brads....80&10%
Trunk and Clout Nails.....80&10%

TRAPS.

GAME.

Oneida Pattern .....75&5@75&10&5%
Newhouse .....45@50%
Hawley & Norton.....65@5&70%
Victor (Oneida Pattern) 75@75&10%
Star (Blake Pattern) ....65&10@70&5%

MOUSE AND RAT.

Mouse, Wood, Choker, doz. holes .....8½@9c
Mouse, Round or Square Wire, doz.....$0.85@1.00
American Pattern French Rat and Mouse Traps—
No. 1, Detroit Marty Pattern, per doz. $4.50; in ½ gro. lots, per doz $4.00
No. 2, Detroit Marty Pattern, per doz, $3.25; in ½ gro. lots, per doz.....$3.00
Detroit Marty Pattern Mouse, per doz. $2.00; in ½ gro. lots, per doz.....$1.75
Diamond Joe Mouse Traps, per doz.....60c
Diamond Joe Rat Traps, per doz.$1.00
Marty French Rat and Mouse Traps (Genuine:)

TWINE.

Flax Twine—

	BC	B
No. 9, ¼ and ½ lb. Balls...	20c	24c
No, 12, ¼ and ½ lb. Balls ...	17c	20c
No, 15, ¼ and ½ lb. Balls ...	14c	17c
No. 24, ¼ and ½ lb. Balls....	14c	17c
No. 36, ¼ and ½ lb. Balls...	13c	16c

Chalk Line, Cotton, ½ lb. Balls18@20c
Cotton Wrap., 5 lb. Balls to lb 16 to 20c
2-Ply Hemp, 1¼ lb. Balls (Spring Twine) .....12@15c
3-Ply Hemp, 1 lb. Balls.....12@15c
3-Ply Hemp, 1½ lb. Balls .....
2, 3, 4 and 5-Ply Jute, ½ lb. Balls... 8c
Mason Line Linen, ½ lb. Balls 45c
No. 204 Mattress, ¼ and ½ lb. Balls 34c
Wool.... .....5½@6c

VISES.

Solid boxes.....40%
Parker's..... .....20%
Howard's.....35%
Bonney's.....35%
Trenton.....40%
Stearns'.... .....50%
Cheney's..... 12½%
Massey's.....25%
Parallel..... ....30&5%
Holland's..... .....35%
Stevens'.....25%
Miller's Falls.... .....40%
Prentiss..... .....20%
No. 1, Rat each $1.12½; per doz. $12.00
No. 3, Rat, per doz. $6 00; case of 50.....$5.25 doz.
No. 3½, Rat, per doz $4 75; case of 72.....$4.25 doz.
No. 4, Mouse, per doz. $3.50; case of 72.....$2.75 doz.
No. 5, Mouse, per doz. $2.75, case of 72.....$2.25 doz.
Schuyler's Rat Killer, No. 1, per gro. $30.00; No. 2, per gro. $30.00; Mouse, No. 3, $18.00.....50%

FLY.

Balloon, Globe or Acme..... doz. $1.15@1.25; gro. ... $10.50@11.00
Harper, Champion or Paragon.... doz. $1.25@1.40; gro....$12.00@12.50

TROWELS.

Disston Brick and Pointing 30%
Disston Plastering.....25%
Disston "Standard Brand" and Garden Trowels.....40%
Never-Break Steel Garden Trowels.....gro. $7.00
Peace's Plastering.....30%
Rose Brick and Plastering.....25&5%
Woodrough & McParlin Pl'st'ring.

WASHERS.

LEATHER, AXLE—

Solid.... ....80&10&10@85%
Patent.... .....85&10@85&20%
Coil: ⅜ 1 1¼ 1¼ inch.
11c 12c 13c 15c per 100

IRON OR STEEL.

Size bolt 5-16 ⅜ ½ ⅝ ¾
Washers $5.20 $4 30 $3.00 $2.30 $2.60
In lots less than one keg add ¼c per lb; 5-lb boxes add ½c to list.

CAST WASHERS.

Over ½ inch, barrel lots per lb ....1½@1¾c

WELL WHEELS.

8-in., $2.20.....10-in., $2.60
12-in., $3.25.....14-in., $3.25

WIRE AND WIRE GOODS.

Brt. and Ann., 6 to 9, 70&10@70&10&5%
Brt. and Ann., 10 to 18, 72½@72½&10%
Brt. and Ann., 19 to 26, 75&7½@75&10%
Brt. and Ann., 27 to 36..... .....75&10&5@75&10&7½%
Cop'd and Galv., 6 to 9, ...70@70&10%
Cop'd and Galv., 10 to 18,..... ..... 70&10@70&10&5%
Cop'd and Galv., 19 to 26..... .....75&7½@75&10%
Cop'd and Galv., 27 to 36,..... .....75&10@75&10&5%
Tinned, 6 to 14..... .....75@75&5%
Tinned, 15 to 18 ....70&5@70&10%
Tinned. 19 to 26..... .....70@70&5%
Tinned, 27 to 36.....65&10@70%
Annealed Wire on Spools..... .....70&5@70&10%
Brass and Copper Wire on Spools .....60&5@60&10%
Brass, list Feb. 26, '96.....25%
Copper, list Feb. 26, '96.....15%
Cast Steel Wire.....50%
Stubs' Steel Wire, $6.00 to £.....40%

BRIGHT WIRE GOODS.

List April 1, 1901.....85@85&10%

WIRE CLOTH AND NETTING.

Galvanized Wire Netting....85@85&5
Ptd Screen Cloth per 100 ft $1.00@$1
Light Hardware Grade:
2-8 Mesh, Plain (8c list) sq ft... 1½c
2-8 Mesh, Galv. (8c list) sq ft ...2½c

WRENCHES.

Agricultural.....70&10%
Case lots..... ....75&10%
Acme..... .....60&5%
Baxter's S..... ..... 60&10%
Bull Dog.....70%
Coe's Genuine.....40&10&5%
Coe's "Mechanic's"..40&10&10&5&5%
Alligator..... .....60&10&10%
Bemis & Call's:
Adjustable S..... .....35&5%
Adjustable S Pipe.....40%
Briggs' Pattern..... .....30&10%
Combination Black..... .....40&5%
Combination Bright.... ....40%
Cylinder or Gas Pipe..... .....55%
Extra Heavy..... ....45%
Merrick's Pattern.....50%
No. 3 Pipe, Bright..... .....55%
Bindley Automatic..... ...30%
Boardman's 33⅓%
Donohue's Engineer.....40&10%
Eagle.... ....50&10%
Gem Pocket..... ....30%
Hercules..... .....70%
Knife Handle, Machinists' (W & B):
Case lots..... .50&5%
Less than case lots.....6%
Improved Pipe (W. & B.)..... 50&10
Solid Handles, P. S. & W.....&10 &
Stevenson..... 56

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS.—H. W. T. JENNER, Patent attorney and mechanical expert, 608 F street, Washington, D. C. Established 1883. I make an examination free of charge and report if a patent can be had and exactly how much it will cost. Send for circular. Member of Patent Law Association.

PATENTS HUBERT E. PECK, 628 F St., N. W. Washington, D. C. Consulting Expert in Patent Causes, U.S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale or Exchange—First-class hardware business in best Northwestern Iowa County seat town. Stock and fixtures will invoice $6,000 to $8,000. Good established business and the leading store in town. Would trade for good 160 acres of Northwestern Iowa or Minnesota land. Cash preferred; best of reasons for wishing to sell. Write at once as this will not be open long. Address "Box O. L.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 13

Wanted—A partner in established hardware stove and tinware business. Nice stock; good trade; best county in the state; good town; population about 5,000. For particulars, address 110 E. 22nd St., Rushville, Ind. 13

Wanted—A good paying hardware and stove business. In good town or small city. Must be cheap for spot cash. Address with particulars. Box 55, Deepwater, Mo. 13

For Sale—Tin shop and small stock of hardware in a good dairy country: with or without tools. D. A. Chesley, Poysippi, Wis. 13

For Sale—Hotel property in a good paying locality; good reasons for selling. Address Box 47, Huntley, Minn. 12

For Rent—Hardware store building, including shelving, counters, etc., in best city in North Dakota. Population, 3,500; only two hardware stocks in the town. This is a "snap" Address "Snap," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 12

For Sale—First-class stock of hardware, stoves and tinware, in a good, live town of 500. Good reasons for selling. Address, Lock Box 42, Ashton, Iowa. 12

Wanted—Small stock of hardware; some near western town. Address J. A. Denkman, Bennett, Iowa. 12

For Sale—A small stock of hardware and harness fittings in the best wheat country in the world. For particulars, address Aiken Bros., Colton, Wash. 11

For Sale—A stock of hardware, tinware, stoves, etc., will inventory about $13,500, doing good business in a town of 5,000 inhabitants. Best of reasons for selling. About 60 miles from Chicago. Will take some trade in the way of small farm or city property. Address "C. J." care AMERICAN ARTISAN, 69 Dearborn St., Chicago. 11

For Sale—A business that has been established for ten years. A stock of hardware, tools and house furnishing goods in first-class condition. Ill health is cause of sale. First-class chance for right party. Address "Box Ten," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 11

For Sale or Trade—Two story brick and steel siding 24x98. Location best in town. Will guarantee rent at $40 per month for ten years. Value of lot and building, $6,000. Will trade for hardware stock, etc. Investigate. Address Box 299, Alden, Minn. 11

Wanted—Stock of hardware, etc. $2,500 to $4,000. Have a splendid modern residence; all conveniences. Chicago best suburb. Steam heat. Everything first-class. Corner lot, 125x165, worth $7,000, to exchange. Will take long time mortgage for difference and make quick deal. Residence now rented for $30 per month. Present tenant will stay indefinitely. Address "Swayze," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 10

For Sale—A $3,500 stock of hardware, stoves, etc., in a thriving Iowa town of 4,000. Stock first-class and trade established seven years. Doing a good business. An excellent chance to step into a paying trade. Shop in connection. Address "Shop," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 10

TINNERS' TOOLS.

For sale cheap, or will trade for power press, one No. 5 Stiles & Parker foot power press with an opening of 14 x 20 inches. This is a very good press for tinware, elbow or furnace shops; is in first-class condition. Address, M. Schrayer's Sons & Co., 49 Blue Island Av. 13

For Sale—Set of tinners' tools including squaring shears and all tools suitable to do work that would come into a shop in a place of 10,000 to 15,000 inhabitants. H. L. McNamara, Janesville, Wis. 13

Wanted—A second hand Crimping machine to crimp galvanized iron; want same to be in pretty good condition. H. Danz, Green Bay, Wis. 12

For Sale—Tinning and Plumbing Department of good hardware doing good business; a rare chance for a good man. Address "Chance Sale," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 12

For Sale—One Peck, Stow & Wilcox double Seamer, a new machine, only been used about one year in all. For price enquire at J. G. Widmann, Wanzeka, Wis. 11

Wanted—1 dozen or more second-hand four caster stove trucks. Martin's adjustable preferred. McGrath & Widmayer, Hampshire, Ill. 10

For Sale—A pair of P. S. & W. 30 inch shears and one P. S. & W. 30 inch tin folder. Box 21, Marengo, Ill. 9

HELP WANTED.

Wanted—At once; a good, sober, strictly first-class tinner. One capable of doing inside and outside tin and galvanized iron work. Must be experienced in cornice and furnace work. Good wages to the right man. Knapp Hdw. Co., Mason City, Ia. 13

Tinners Wanted—Alfred Martin & Co., Rockford, Ill. 13

Tinners Wanted—Mertz & Mochel, Downers Grove, Ill. 13

Tinners Wanted—W. M. Forward & Co., Sycamore, Ill. 13

Wanted—At once; 6 tin roofers. Over 400 sq. to be put on. Inquire at State Fair Grounds Sprinfield, Illinois, or correspond with F. C. Muhl, Bloomington, Ill. 13

Wanted—Good, sober, industrious tinner. To work in a large reaper factory about nine months of the year. The other time do job work on your own account. I can furnish a small tin job shop complete for a small rental. Address 206 Lagonda Ave., Springfield, Ohio. 13

Wanted—A good tinner. Steady job. G. L. Miles, Grinnell, Ia. 13

Wanted—Tinner and sheet metal worker at once. Steady work at $2.50 per day of nine hours. Address Paducah Sheet Metal Wks., Paducah, Ky. 13

Wanted—At once; a good, first class tinner who can take my place in shop, can do in and outside work; must be sober and steady; prefer one who can speak German, good wages and steady job the year round to right man. Write me at once. A. S. Rice, Genoa Jct., Wis. 12

Wanted—At once, Good Tinner and Furnace Man. Geo. W. Stewart, Washington, Ia. 12

Wanted—At once, a good young man, that is a first class tinner and understands plumbing and furnace work, will pay good wages and give steady work the year around. Want a man at once. Maher & Son, Preston, Ia. 12

WANTED—Man familiar with stove trade to handle Stove Repairs as a side line on a salary basis. Box Z, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 12

Tinner Wanted—For general job work; one who has had some experience in plumbing. State wages expected. Address, Fred Thomas, Menominee Falls, Wisconsin. 12

Wanted—Tinner, who can clerk in store and keep stock. None but hustler need apply; steady job; state wages. Write at once. Greig Bros., Mitchell, Iowa. 12

Wanted—An experienced stove salesman, for city and country. Address "C & C.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 12

Wanted—A hustling, first-class tinner who understands pump and furnace work. Prefer one who speaks Danish language. Cannot promise steady job after Christmas. State wages, reference and experience. Address Lock Box 299, Alden, Minn. 11

Wanted—Tinner. Address W. B. Frymire, Bloomfield, Neb. 11

Wanted—A young genuine American with some experience in store and tinshop. Must have a man at once. Bruns, Lake Mills, Wis. 11

Wanted—A good all-around tinner who understands iron pipe work, hot water heating and furnace work. Must be sober, a hustler, a married man and a German. A good job to the right man. Address "Man," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 10

Wanted—A young man with some experience as tinner, competent to repair old stoves and gasoline stoves, also to do plain bicycle repairing. Steady employment to the right man. State wages and experience. J. B. Sperry, Fort Huron, Mich. 10

SITUATIONS WANTED.

Wanted—An A1 tinner of long experience, who is capable of taking full charge of any-size tin shop. Good pattern cutter and estimator and a total abstainer. State best wages you could afford to pay such a man. Steady work the year round. Address "Furnace Expert," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 13

Situation Wanted—As salesman in hardware store. Several years' experience. Best of references. Address C. F. Brady, Shelton, Neb. 13

Situation Wanted—As salesman in hardware store. A1 builders' hardware and stove salesman. Would travel, if necessary; can furnish references. Address "A. R.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 12

Situation wanted—By a young man 21 years old, and am German. Have had 5 year's experience as tinner and hardware clerk, can also repair bicycles and oil stoves. Would like a job as clerk. Nothing but a steady job wanted. Address "Tin," care the AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 11

Situation Wanted—By sheet metal worker. Familiar with heating and ventilating. Can lay out his own work and make plans and drawings where necessary. Address "Box 85," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 10

SPECIAL NOTICES.

WANTED

A competent man to take general supervision of the manufacturing departments of a well established stove foundry. Address, giving past experience, present employment and qualifications for position, "Foundryman," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 13

Wanted

GOOD TRAVELING MAN to represent an A No. 1 Tin Plate and Metal House in western territory.

"Western Metal"

care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 13

WANTED

A man with sufficient experience in the stove business to assume the management of the sales department of a reputable establishment. State present employment, character and duration of past experience and general fitness to fill position indicated. Communicate with "Experience," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 13

WANTED

A 2d hand Geared Double Crank Press for Range Making, about 33 inches between uprights, opening in bed 16x24 inches. Give full particulars, dimensions, weight, condition and price. Address,

"Range Maker"

care of THE AMERICAN ARTISAN, 69 Dearborn St, Chicago, Ill. 13

Good Tin Business

in Cripple Creek, Colo.; fine set tools; central location; ground rent only $5.00 per month. Some stock; building and all for $500.00. Mining reason for selling. Address "C. C.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 12

SPECIAL NOTICES.

WANTED.

Position as bookkeeper or auditor. Have had twelve years' experience. Have lately been manager of large manufacturing firm in Wisconsin. Best of references. Address:

"BOOKKEEPER,"
Care of THE AMERICAN ARTISAN. 11
69 Dearborn St., Chicago, Ill.

WANTED

Permanent situation by an experienced stove manufacturer, as superintendent or manager. Good character. Steady habits and competent. Address,

"Superior,"

care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill.

YOUNG MAN

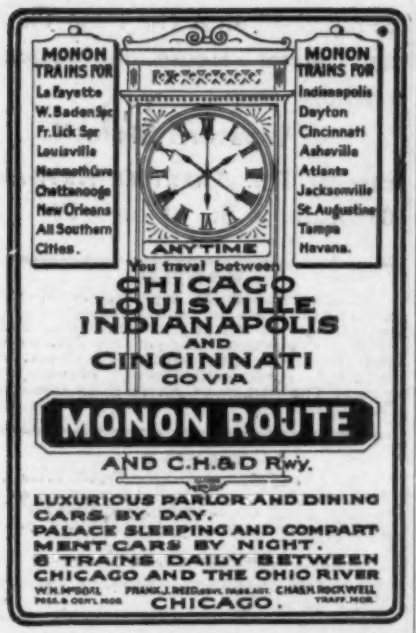
With good connections in British Isles and Continental Europe wishes agencies for a few lines of American manufacture. Prompt attention. References. Address

MONTAGUE,
39 Paradise Street,
Liverpool, Eng.

If You Advertise,

or intend to, these ads are worth 10 times what they cost you. Increased our sales. Catchy headlines, ready for printer. Stamps taken. Address, H. P. Townley, Terre Haute, Ind.

50 Hardware Ads	50c
50 Bicycle Ads	50c
50 Furnace Ads	50c
50 Implement Ads	50c
100 Steel Range Ads	100c



THE merchant who doesn't advertise is in a rowboat, pulling and steering and making no headway. The advertiser is in a steam launch, and has only to steer and keep his boat trimmed.—*Brattleboro (Vt.) Reformer.*

STOVE DEALERS

will make money and save money by using

DIXON'S GRAPHITE CEMENT.

There is nothing equal to it for repairing fire brick in stoves, furnaces, etc.
Let us send you sample and prices.

JOSEPH DIXON CRUCIBLE CO., • Jersey City, N. J

Books by Mail

The Publisher of the American Artisan will take pleasure in supplying Books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

Sheet Metal Working. The Foundry. The Workshop. Heating and Ventilating. Plumbing and Drainage. Bicycle Repairing. The Store and Office.

Daniel Stern,

Publisher and Bookseller,
69 Dearborn St. CHICAGO.

The man who does not advertise, says the *Ashland, O., Gazette*, simply because his grandfather did not, ought to wear knee breeches and a queue.

The man who does not advertise because it costs money should quit paying rent for the same reason.

The man who does not advertise because he tried it and failed, should throw away his cigar because the light went out.

The man who does not advertise because he doesn't know how himself, ought to stop eating because he can't cook.

The man who doesn't advertise because somebody said it did not pay, ought not to believe that the world is round because the ancients said it was flat.

Carlton Hdw. Co., Calumet, Mich., write "Please discontinue ad. in The American Artisan for salesman wanted. We have had bushels of applicants."

MICA

ASSORTED PACKAGES.

Put up expressly for the Retail Trade.

ONE POUND—4 SIZES. ¼ lb. each size.

North Carolina -	$2.00	4½ x 6	2½ x 3
Wyoming - - -	1.70	2¾ x 3¾	2¾ x 4½

TWO POUND—8 SIZES. ¼ lb. each size.

North Carolina -	$3.75	2 x 3	2¾ x 4
Wyoming - - -	3.20	2 x 4	2¾ x 3½
		3 x 3	2½ x 4½
		3 x 4½	4½ x 6½

THREE POUND—12 SIZES. ¼ lb. each size.

North Carolina -	$5.20	4½ x 5	2¾ x 4
Wyoming - - -	4.25	¾ x 4½	2½ x 3½
		3 x 3	2 x 4
		2¾ x 4½	2¾ x 2¾
		2½ x 3	2¾ x 3½
		2 x 3	5 x 6½

ABOVE PRICES NET. NO DISCOUNT.

EUGENE MUNSELL & CO.,

218 Water St., NEW YORK and 117 Lake St., CHICAGO.

Russen Bros., Stephen, Minn., write:

"We have already received more answers to our advertisement in 'The Help Wanted' column of The American Artisan than we have time to answer, and believe we have secured the man through the same, just the man we want for a tinner. Therefore, please leave it out of the next issue and save us stamps answering same. It has run but one issue."

COMMERCIAL LAW. COLLECTIONS

THE AMERICAN ARTISAN AGENCY,

LAW AND COLLECTION DEPARTMENT OF

THE AMERICAN ARTISAN,

UNDER MANAGEMENT AND PERSONAL SUPERVISION OF

RALPH F. STERN, Atty. 69 Dearborn Street, CHICAGO.

Today is the time to attend to your past-due accounts. Let us help you.

We have a thoroughly organized Collection Department. Collections made anywhere.

Full reports furnished and remittance made the same day collection is made. Careful attention guaranteed in each case.

Rates reasonable, and no charge where no collection is made.

No membership fee.

Reliable attorneys in every city and town. Claims prosecuted without litigation whenever possible. Long distance telephone in office.

PHONE EXPRESS 677.

CHICAGO REFERENCES:——
Chicago Engineer Supply Co.
Babcock & Wilcox Co.
Robert Stevenson & Co.
Regan Printing House.
And any National Bank in Chicago.

THE AMERICAN ARTISAN AGENCY.

RALPH F. STERN, Attorney,

69 Dearborn St., CHICAGO

E. D. Strong
Dryden, Mich.
writes:

At present I am not in the Hardware business, but feel that I cannot afford to be without THE AMERICAN ARTISAN. It is a most valuable paper.

Buckeye Decorative Home Paints are just what their name signifies—a paint designed for household use, for repainting old chairs, the lawn settee, the baby's wagon or sled, the interior of a room, or any place where a quick-drying, glossy surface is required. They are put up in convenient shape for both dealer and consumer.

Buckeye Paint & Varnish Co., Toledo, O.

ARE YOU MAD

at the house that sent you that last batch of misfit repairs, then try **ORIGINAL STOVE REPAIRS** which are guaranteed. WE stand expense if not correct. Our ORIGINAL ORDER-BOOK simplifies caring for this branch of your business, it's free to our customers.

UNION STOVE REPAIR CO.,
2852-2854 Archer Avenue, CHICAGO.

Repairs For all Stoves
Great Western Stove Repair Co.
MINNEAPOLIS, MINN.

Stove, Range and Furnace **REPAIRS**
OF ALL KINDS.
American Stove Repair Works,
186-188 West Seventh Street, ST. PAUL, MINN.

REPAIRS FOR ALL STOVES AND RANGES.
A. G. Brauer, 316-318 North Third St., ST. LOUIS, MO.

Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb., and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

BRIDGEPORT CRUCIBLE CO.
BRIDGEPORT, CONN.

Why not remodel your Oaks and Oval air-tights so as to use cast-iron where you now use sheet steel? More attractive!
Planished and Sheet Steel will be scarce.
The Gobeille Pattern Co., Cleveland, O.

THE GEO. W. COPE STOVE PATTERN WORKS,
Randolph and Atwater Sts.
DETROIT, MICH.

Experience. Correctness.
Acme Pattern Works
STOVE and HEATER Patterns
AKRON, OHIO.
Promptness. Satisfaction.

Indianapolis Artistic Pattern Works,
Cor. Fenneman and Minnesota Sts.
INDIANAPOLIS, IND.
Perfect Work. Right Prices.
Special Stove and Furnace Patterns.

B. S. ESTES,
Devil's Lake, N. D., writes:
"I have secured a good man, thanks to my ad. in The American Artisan. You have my heart-felt thanks."

R. H. Fichtenmueller, Waukon, Ia., writes, "I could not get along without THE AMERICAN ARTISAN."

REPAIRS FOR ALL STOVES

Pipe Dampers, Mica, Stove Rods, Paste, Stove Putty, Stove Knobs, Etc.

Wm. T. Dust Co.,
231 Brush St., DETROIT.

M. Brucker,
Manufacturer and Jobber of
Stove and Range Repairs.
FOUNDRY, OFFICE AND WAREROOMS
325 to 331 North Lincoln St.,
CHICAGO.

J. L. Morris Stove Repair Co.

Wholesale and Retail Dealers in

Stove and Range Repairs, Mica, Etc.

OFFICE AND WAREROOMS
29 and 31 Desplaines Street, Chicago.

Sole Western Agents for BURDETT, SMITH & CO., and other Manufacturers' Original Repairs.

To Stove Dealers
NOTICE.

Do you know that the new A-B dealers' stove polish is made dry and you can thin it as you wish. It is the cheapest, blackest, brightest and easiest polish to use—no dust—no rust—waterproof. Keeps in any climate. Put up in 5-lb. boxes—Patented. No tin cans to pay for. Mixes quicker than paste; no drying up, good always. Used by a great many stove manufacturers who are sending duplicate orders. Send for Free Sample and price list; it will save you money.

AYLING BROS.,
Sole Manufacturers and Patentees of A-B Stove Polish
Office and Works, 14 Haddon Ave.,
Address Department A. CHICAGO, ILL.

Superlative Blackness

has heretofore been denoted by such phrases as "black as Erebus," "black as a black cat on a dark night," "black as the character of Judas Iscariot." Now it is denoted by the phrase: "Blacker than

Black Silk Stove Polish."

No polish is so good and fine as "Black Silk." Write for prices.

Lewis D. Wynn, Sterling, Ill.

Write J. P. Watson & Son, Marshall, Minn.,
"You will please take out the want advertisement for Tinner you got us one and "FORTY" applicants:"

SELECTED
MICA
ONLY
Prepared expressly for the Stove and Hardware Trade.
Two Grades: "North Carolina" and "Nevada."
Price Lists and Discounts Sent on Application.
The Palermo Mica Co.,
115 BEEKMAN ST., NEW YORK.

ORDER YOUR
Repairs for Stoves, Ranges and Furnaces
FROM
City Stove Repair Co.
CLEVELAND, OHIO.
We guarantee prompt and careful attention. Send for Order Slips.

The Brohard Damper Clip,

Easily Adjusted
The Clip being malleable iron, will not break in riveting.
Cost no more than all cast.
Sample free to introduce.
Write us.

The Brohard Co.
Phila., Pa.

BARKEEPER'S FRIEND.
Marble, Glass, Nickel, Brass, Copper, Tin and German Silver
can all be cleaned and polished with it easier than with anything else. Price 25 cents per pound.
Let us send you a free sample.
GEO. WM. HOFFMAN
295 E. Washington St., Indianapolis, Ind.
FOR SALE BY JOBBING TRADE

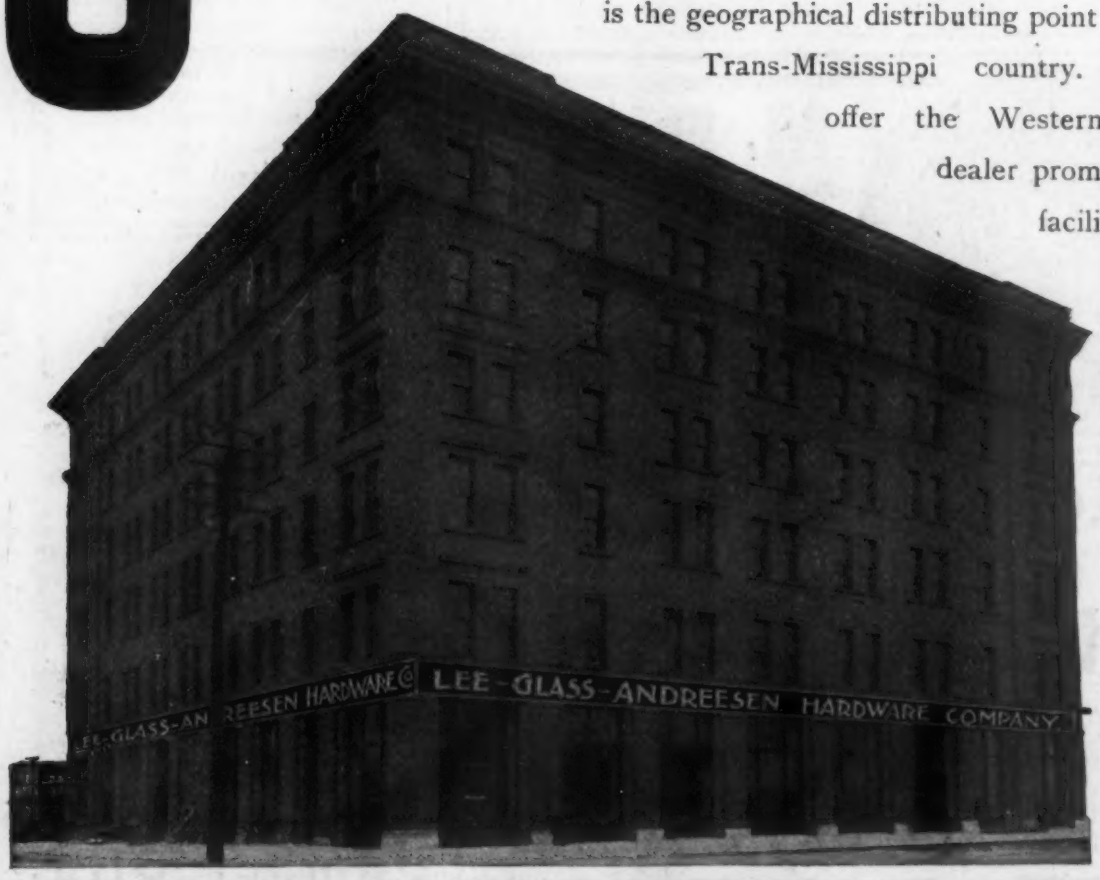
Henry Bidlake, Osnabrock, N. D., writes:
"Please discontinue ad for Tinners' Tools in your paper. It has done its work well."

OMAHA

is the geographical distributing point of the great Trans-Mississippi country. We can offer the Western hardware dealer prompt shipping facilities that are absolutely beyond the reach of our competitors.

Our prices are right.

Our goods are made to meet Western requirements.



Peters Cartridges

Peters Cartridges

Peters Cartridges

LOADED WITH

King's Semi-Smokeless Powder.

PETERS .22 CALIBRE RIM-FIRE CARTRIDGES
won the National Sportsman's Exposition Tournaments, New York, in 1898. 1899, 1900 and 1901. The New England Sportsman's Tournaments and all the recent indoor rifle tournaments.

PETERS REVOLVER CARTRIDGES
made the highest scores at the long and the short range in the **International Revolver Match,** 1900. At Sea Girt Meeting, 1900, they won the Re-entry Revolver Match and the Revolver Team Match.

PETERS .45 CALIBRE GOVERNMENT CARTRIDGE
won these important matches at the Sea Girt Meeting, Aug. and Sept., 1900: Interstate Military Match; Regimental Team Match; Alicomers Military Match; New Jersey Rifle Association Trophy Match; Winchester Match.

KING'S SEMI-SMOKELESS POWDER

Won the Wimbledon Cup Match, Sept. 1900, 80 Shots at 1000 yards. This powder is the **Sportsman's All-round Powder,** Superior for long or short range shooting in Rifle, Revolver, Pistol and Gun.

Handy Book for Shooters and Sportsmen sent free to all applicants.

The Peters Cartridge Co.,

Government Square, Cincinnati, Ohio.

EASTERN BRANCH: { **T. H. KELLER, Manager, 80 Chambers Street, NEW YORK.**

Peters Cartridges

Peters Cartridges

Lackawanna Railroad

The Scenic Line TO New York City

Palatial Solid Vestibuled Trains
Superb Dining Cars
(Meals a la Carte)
Observation Cars **Latest Pullmans**
Elegant Day Coaches

3 THROUGH TRAINS DAILY from CHICAGO 3

Leaving Chicago	Arriving New York
10.35 a. m.	3.35 p. m. next day.
2.30 p. m.	7.30 p. m. next day.
10.30 p. m.	7.10 a. m. 2d day.

Rates $18.00 First Class, $16.00 Second Class

CITY TICKET OFFICE: 103 Adams Street
GEO. A. CULLEN, Gen'l West'n Pass. Agt.
CHICAGO

Brilliant Enameled Steel Ware

This ware is now manufactured by our factory at Bellaire in the Brown Color only, same having been discontinued in all colors by our Portland, Conn. factory. Particular effort is being made to turn out a highly satisfactory and pleasing article, and all dealers are requested to order a sample lot to be convinced of the merit of this ware.

White and White Enameled Steel Ware

This ware will also be made by our Bellaire Factory only hereafter having been discontinued by the Portland Factory. A large line of hospital goods made in this ware Recommended where sanitary qualities are essential.

National Enameling & Stamping Co.

BRANCH OFFICES New York Baltimore Chicago St. Louis Milwaukee ADDRESS OFFICE NEAREST YOUR LOCATION

Simeon L. and George H. Rogers Company

The United States Circuit Court for the District of Connecticut, Hon. Nathaniel Shipman, Judge

HAS NOT ENJOINED

us from doing business under, and marking our goods with, our name as above.

The "Trust" has not stopped us from making and selling silver plated ware; nor can it do so. The trade can safely buy of us and handle our goods, which we guarantee of full standard quality; the equal of any on the market.

SIMEON L. and GEORGE H. ROGERS COMPANY

SILVERPLATERS

Factories:
Hartford, Conn. and Wallingford, Conn.

P. O. Box 1205
Hartford, Conn.

The Tinsmiths' Pattern Manual

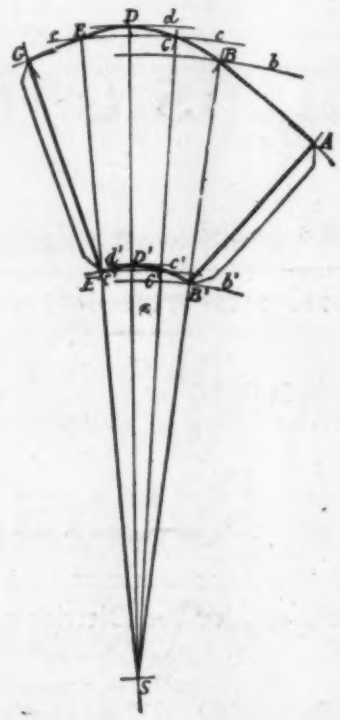
Is recognized as a standard authority on sheet metal work. A new revised and up-to-date edition of 248 pages, 8 x 5, containing over 100 illustrations, has been issued. A page from this book is shown herewith.

208 THE TINSMITHS' PATTERN MANUAL.

or S' *c* (which is equal to S E) and S' B successively as radii describe arcs cutting S' *d* in *e* and *f*. Draw *e* C, *f* F perpendicular to X X and cutting it in C and F; also join C S, F S, cutting O" D' in C' and F'.

Next draw S D (Fig. 79) equal to S D (Fig. 78), and with S as centre and S C, S F (Fig. 78) successively as radii

Fig. 79.



describe arcs *c* and *b*. With D as centre and radius equal to *d* E (Fig. 78) describe arcs cutting arc *c c* in E and C. With C as centre and radius *c* B (Fig. 78) describe an arc

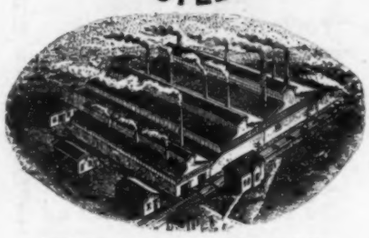
PRICE, $3.50 Per Copy.

Order from your bookseller, or from

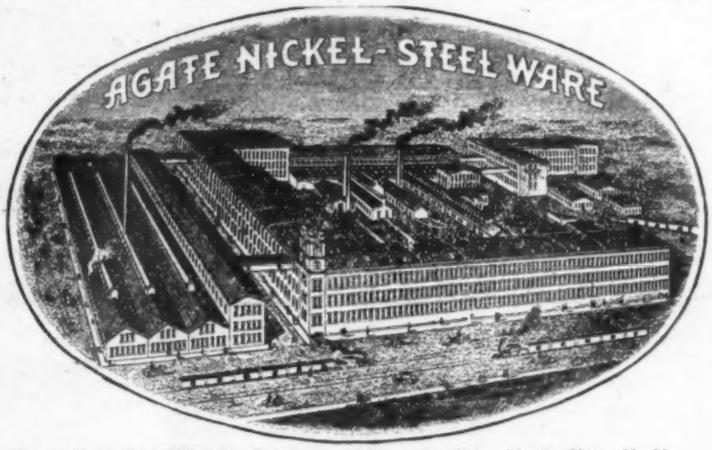
DANIEL STERN,

69 Dearborn Street, CHICAGO, ILLINOIS.

Trade AGATE NICKEL-STEEL-WARE Mark.
L & G Mfg. Co.



Rolling Mills, Harrisburg, Pa.



Factories: Woodhaven, Borough of Queens, New York City, N. Y.

The Largest Plant on earth for manufacturing enameled and sheet metal wares. The home of the **"Agate Nickel-Steel," "Pearl Agate," "Peerless"** and **"Blue and White" Wares,** and the celebrated **"L. & G." Steel Sinks, Plain and Retinned, Shallow and Deep Stamped, Japanned and Pieced Tinwares, Spoons, Milk Cans, Etc.**

Lalance & Grosjean Mfg. Co.

MAIN OFFICE:	WESTERN BRANCH:	EASTERN BRANCH:
19 & 21 Cliff Street,	81-83 Michigan Ave.,	83-91 North Street,
NEW YORK.	CHICAGO.	BOSTON.

Trade "M&M" Mark

The "M & M" 450 CANDLE POWER ARC LAMP

Trade "M&M" Mark

THE BEST IS THE CHEAPEST.

STORE LAMP. Patented.

Burns 12 to 15 hours with one filling. Diffuses more light than any electric arc. Does not affect your insurance policy. Permitted by all insurance companies. Absolutely non-explosive, odorless and smokeless. Tried, tested and used commercially for three years. Over 25,000 in practical use. One satisfied customer says:

Joliet, Ill., Mch. 22, 1901.
MARTIN & MOORHEAD,
54 W. Washington St.,
Chicago, Ill.

Gentlemen: We used six of these lamps last year and kept an accurate account of the expense. The gasoline cost us $25 and the chimneys and mantels $20.46 making a total cost of $45.46 for six lamps for a year. We believe we have just as good light as though we had had six electric arc lights, which would have cost us $360.

Yours respectfully,
BARRETT HARDWARE Co.

STREET LAMP. Patented.

There are others. We are saving light consumers thousands of dollars every month. We will furnish full particulars on request. Agents wanted in all unoccupied territory. Exclusive territory given. Our Pressure Mantles without an equal for use with any gasoline pressure light

Acorn Brass Works, DEPT. 4, **Chicago.**

Martin Timmer, Knox, No. Dak., writes:

"Please stop my 'ad' (situation wanted) in your paper, as I have had dozens of letters in reply and have found the position I wanted."

The Power of Advertising.

No business can be successfully founded or continued without the aid of advertising. Good and convincing advertising is as essential to the winning of business success as a fresh and desirable stock of commodities in the store. It makes the merchant and his goods known, and brings purchasers to his establishment.

CHRISTIAN PROBST, HARTFORD, WIS., WRITES . . .

"I don't doubt the enormous circulation of your paper. I got all kinds of offers from all kinds of people. Please discontinue my adv. because I have all the jobs I can take care of."

"Yankee" Screw Drivers.

old by Leading Jobbers. Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

IT DON'T TAKE MUCH PUSH

Practically none—to sell our "Roller Bearing" Sweepers. They are the smoothest and easiest running sweeper made. Our new dust proof "Roller Bearing" is

Simple—Durable—Practical.

No del cate or complicated parts to wear out or get out of order. Made of the best materia's. Dust caps keep bearings free from all dirt.

National "Roller Bearing" Carpet Sweepers

are fitted with this new bearing, which reduces friction to the minimum, making them at least 50 per cent. easier running. Each sweeper packed in a card board box. **Write now for our special fall offer. It is worth your while.**

NATIONAL SWEEPER COMPANY

1902 PARK ST., - - MARION, INDIANA.

We Make Wringers, too.

A Special Hardware Wagon.

Low Down.
Short Turn.
High Wheels.
Saves the Heavy Lifting.
Makes Quick Delivery.
For Prices, Terms, &c., Address,

SHIPMAN. BRADT & CO.. 305 North 3d St., DE KALB. ILLS

The Johnson Lighting Co.,
Atlantic, Ia., write:

"Please withdraw our ad. 'Wanted, a First-class Galvanized Iron Worker.' One insertion did the business."

EVERY HARDWARE DEALER.

SHOULD BUY

LAMBERSON'S HARDWARE PRICE BOOK.

The alphabetical arrangement of goods has been adopted in this book. The name of each article is printed in a space at the left of the page, with six columns at the right for insertion of list, cost, sell, or anything else required.

The book contains a large list of shelf and heavy hardware, such as is kept by hardware dealers in all sections. Sizes in leading lines are printed, and some useful tables and comparative lists are given. List prices are omitted for the obvious reason that they are liable to change. but forms are arranged with printed headings and sizes, so that they may be added with pencil, and changed when necessary.

Blank pages are bound in each alphabetical division so that additions may be made in proper alphabetica order, and will be found sufficient for all ordinary purposes. Pocket Edition, as shown in cut, 250 pages, 4x7 inches. Full leather, with flap, Price $4.00. Large edition for office or store use, substantially the same as the pocket edition except in size, 500 pages, 6x9½ inches, leather, $8.00. Sent postpaid on receipt of price.

DANIEL STERN,
69 DEARBORN STREET,
CHICAGO.

E. W. Lowell
of the Lowell Hardware Co.
Janesville, Wis.
Writes:
"We can't do business without THE AMERICAN ARTISAN."

HAVE YOU SEEN IT. SEAVEY'S IMPROVED MITRE BOX 1901 PATENT. THE **GREEN BOOK** OF HARDWARE SPECIALTIES WILL TELL YOU IT IS THE GREATEST IMPROVEMENT OF THE AGE. AND THAT IS SO. IT IS NEAT, HANDY, LIGHT AND VERY USEFUL TO ALL MECHANICS.

THOMSON BROS. & CO.

SMITH & HEMENWAY CO.
UTICA DROP FORGE & TOOL CO.

Ask your dealer for these goods. **296 Broadway, NEW YORK CITY.**

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS **Sold by All Hardware Dealers**

NEW BRITAIN, CONN.

THE "DISSTON SAW" WILL DO MORE WORK WITH LESS EXERTION AND HOLD ITS CUTTING EDGE LONGER THAN ANY OTHER BRAND OF SAW.

Fully Warranted as to Material and Manufacture.

Henry Disston & Sons, Inc.,
Keystone Saw Tool Steel & File Works.
Philadelphia, Penna.

For Additional Information Send a Postal For Our Pamphlet "Practical Hints To Mechanics."

No other "Just as Good" as the

Enterprise Food Choppers

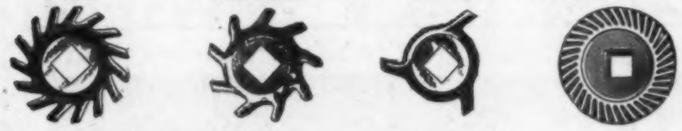
TINNED

Now made in TWO sizes

No. 100, chops 2 lbs. per minute, $1.50
No. 300, chops 3 lbs. per minute, $2.25

FOUR KNIVES WITH EACH MACHINE

Fine Medium Coarse Nut Butter Cutter



Order from your Jobber
Catalogue mailed Free

The Enterprise Mfg. Co. *of* Pa.

New York Branch, 10 Warren Street — Philadelphia, U. S. A. — San Francisco Branch, 105 Front Street

SPERRY'S CALDRONS....

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to original, as they have light bottoms and heavy sides and hold less.

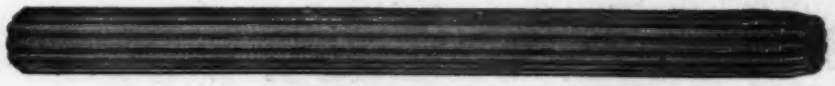
D. R. SPERRY & CO.,
HOLLOW-WARE FOUNDERS,
BATAVIA, ILL.

TWELVE SIZES ALWAYS IN STOCK.

CHAPIN & RUE
CHARLOTTE, MICH.,
WRITE....

"We could not get along without The American Artisan, and look for same each Sunday same as we do for our Sunday paper. If the retail dealers would read your paper regular from first page to last as they should, your circulation would increase largely."

PLECKER'S CORRUGATED EXPANDING CONDUCTORS.
Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice.



Clark, Quien & Morse, - Peoria, Ill.

THE ORIGINAL **BRAMMER Rotary Washer.**

An especially well made and light running machine and GUARANTEED TO GIVE SATISFACTION.
A simple, powerful and durable movement. This very substantial tub is made from a select quality of Cypress lumber.
Made also in the detachable leg style, as well as square.
We manufacture the most complete and satisfactory line of Washers on the market. Send for illustrated catalogue.

BENBOW-BRAMMER MFG. CO.,
1007 N. 13th Street,
FACTORIES: St. Louis, Mo., Davenport, Ia. **ST. LOUIS, MO.**

Gee Whizz Washer

A Novelty and a Winner.
Does what it is intended and guaranteed to do.
Made without hoops or staves, will neither shrink, leak nor fall down. The labor saving washer of 20th Century. Our circular describes the reflex motion and tells why it whirls, rubs, slaps, squeezes and sucks the dirt out of the clothing.
You want the agency.
Write for particulars to
RANDLEMAN & SONS, Des Moines, Iowa.

THE **Peerless Flue Stopper**

Steel wire springs instead of sheet iron stays.
Stays where you put it, and is absolutely soot and smoke proof.
Made either plain or decorated.
Send for miniature sample and prices.

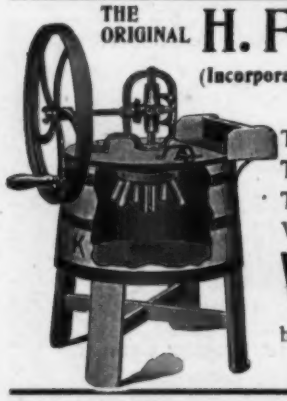
Welling Manufacturing Co.,
Columbus, O.

BIG FOUR ROUTE

Chicago to { Indianapolis, Cincinnati, Louisville, the South and Southeast

Peoria, St. Louis, Indianapolis, Cincinnati, Louisville } To **New York** AND **The East**

W. P. DEPPE, A. G. P. & T. A. — W. J. LYNCH, G. P. & T. A.
CINCINNATI.
J. C. TUCKER, G. N. A., 234 Clark St., Chicago

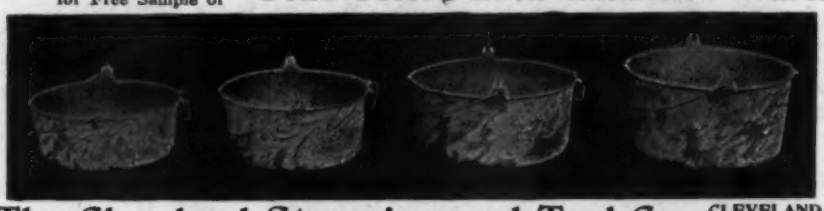


THE ORIGINAL **H. F. Brammer Mfg. Comp'y**
(Incorporated 1888) DAVENPORT, IOWA.
MANUFACTURERS OF
The Original Improved Brammer Washer.
The Original O. I. C. Pendulum Washer.
The Original O K Rotary Ball Gearing Washer.
With Gold And Copper Bronzed Hoops And Castings.
WE LEAD. Others imitate. The superiority of our Washers is too well known, and dealers will not be misled by similar machines.
Quotations and particulars will be sent on request.

Persistent Advertising

One who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—[*Advertising Experience.*

Send 10c. in Stamps for Free Sample of **"Solid-Steel" Lava Enameled Ware.**

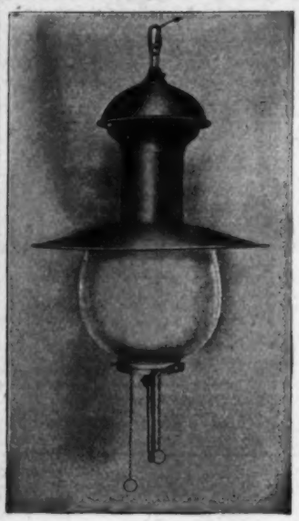


The Cleveland Stamping and Tool Co., CLEVELAND, OHIO

"Eagle" Brand Copper Rivets and Burrs.
STANDARD FOR QUALITY. (Lake Superior Copper.)
——MANUFACTURED BY——
THE PLUME & ATWOOD MFG. CO.,
29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.

M. O. Miller, Cambria, Wis., writes: "Please discontinue my adv. in the want column of The American Artisan or I shall have to engage a stenographer."

E. J. Schultz, Kewanee, Ill., writes:
"I can say that my advertisement in The American Artisan convinces me that I cannot afford to be without your paper."



ELECTRICITY? NOT MUCH!!!

It's the wonderful one-gallon

DORAN LIGHT.

Equal in every way to an Electric Arc Light at one-tenth the cost.

They can be turned up or down at will and are the most diffusive lights on the market today.

RESPONSIBLE AGENTS WANTED IN EVERY TOWN WHERE WE ARE NOT REPRESENTED.

THE SALE OR RENTAL OF DORAN LIGHTS WILL GIVE YOU AN INCOME OF FROM $200 TO $1000 PER MONTH.

Mr. W. C. Coleman, of Fort Worth, Texas, who has several offices throughout the west, says, under date of July 7th, 1901—"I have an income of $1000 per month after having handled your lights for two years."

We protect our representatives in the territory that we assign them.

Send for catalogue and descriptive matter.

ACORN BRASS WORKS, Dept. H, **Chicago, Ill.**

THE ARRAS CREAM SEPARATOR

Separates cream from milk thoroughly without dilution and no machinery. The most convenient device for handling milk, winter and summer, on the market.

A Sure Seller sold only to one dealer in each town.

Write for prices and descriptive catalogue to

The Arras Cream Separator Co.
Bluffton, Ohio.
Pat. May 21, 1901.

FRED. J. SWAINE

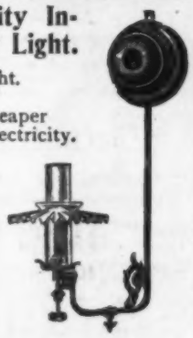
PRESSES. DIES.

Rolls & Seamers. Sheet Metal Tools.

930-932 NORTH MAIN ST. ST. LOUIS, MO.

Artificial Light Revolutionized!

Merkel's Simplicity Incandescent Vapor Light.
An absolutely safe light.



Highly polished brass with gold finished ornament. **WALL LAMPS** Absolutely cheaper than gas or electricity.

THIS lamp consumes about one pint of gasoline in six to eight hours, and with the improved mantel produces a soft, steady and very brilliant white light, from 80 to 100 candle power. The Merkel Simplicity Light will not smoke or discolor ceilings.

Send for catalogue. Manufactured and patented by

H. MERKEL,
513-515 Elm St. ST. LOUIS.

The Southern Railway and The Mobile and Ohio Railroad

through its Land and Industrial Department invite prospectors, investors, manufacturers and homeseekers to investigate propositions in all lines.

Come and see what splendid opportunities the South affords. Reading matter, maps and detailed information sent free upon application to

M. V. RICHARDS, Land and Industrial Agent, Washington, D. C.
W. L. HENDERSON, Agent, Land and Industrial Dept., St. Louis, Mo.
J. F. OLSEN, Agent, Land and Industrial Dept. 225 Dearborn St., Chicago.

Iwan's Improved Serrated Hay Knife

WITH WAVING EDGE.

Adjustable Handles, Wood or Iron Grips. Cuts hay or straw faster and easier than any other knife on the market, and **keeps sharp longer.**

Packed one dozen in a box.
SOLD BY ALL JOBBERS.

Tool steel blades, malleable iron back. **A perfect tool.** Write for prices and discounts for our Post Hole Diggers and full line of Hardware Specialties.

Iwan Bros., Streator, Ill.

THE MIGHTY MITE.

CUT OF STOVE OPEN. CUT OF STOVE CLOSED.

The Only Folding, Portable Gasolene Vapor Stove Made.

A marvel of compactness and design.

IT IS THE SMALLEST. IT IS THE SAFEST.

Just the thing for Hunters, Campers, Picknicking, Etc. Size closed, 7½x7x4 inches. Weighs 5 lbs. Can be carried as a satchel or packed in a trunk.

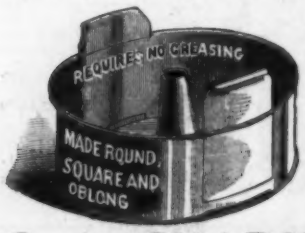
EDW. E. McMORRAN & CO., MANUFACTURERS.
15-21 N. CLINTON ST., CHICAGO, ILL.

F. W. CARLEY, Hancock, Wis., Writes:

"I received your paper this morning also more letters than I have got time to answer. I will ask you now to please take out my ad, as I have a position now, as tinsmith. I am well pleased with the paper, and am very thankful for the information I have received from it. Every tinner should take it. A man could not afford to be without it for the small price it costs."

Greig Brothers, Mitchell, Iowa, write:—"Please discontinue ad for tinner, we have had applications from Ohio to Northern Wis."

The Mrs. Van Deusen Cake Molds



Are the Only Practical and Durable Cake Molds Made. Simple and easy to operate. The Only Molds that give perfect satisfaction, and when used in connection with the Rules and Recipes that accompany them will insure perfect success, and cakes of the highest degree of perfection.

C. A. CHAPMAN, MANUFACTURER OF HOUSE-FURNISHING SPECIALTIES,

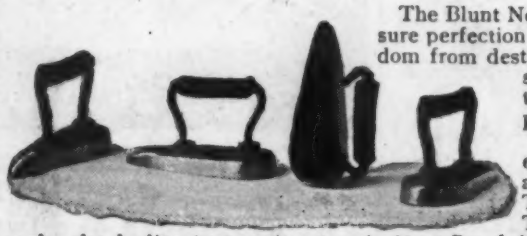
279 EXCHANGE ST., GENEVA, N. Y.

Standard Chain Company.

Chain of all Kinds.

Pittsburgh, Pa.

Sleeve or Flouncing Sad Iron.



The Blunt Nose is so shaped as to insure perfection of work and perfect freedom from destruction of garments from snags, etc., as so often is the case with sharp pointed irons.

These irons should be in every household. They are an absolute necessity. These Irons are made in Two Sizes, 3 and 4 lbs. each, the bodies being plated with Heat-Proof Aluminum Enamel; face, sides, nose, and heel highly polished. A ready seller.

Blacklock Foundry,

South Pittsburg, Tenn.

There's One "Combine"

Anti-trust dealer need have no scruples about endorsing. **It's the "combine"** of the hottest iron and the coolest handle found in our

This is our laundry iron especially designed and constructed to meet the demand for a better and more efficient sad iron for family use. A set consists of one Handle and Asbestos Lined Cover combined, three interchangeable cores or bottoms and one Asbestos covered stand.

The Dover Mfg. Co.

Successors to Asbestos Sad Iron Co. **Canal Dover, O.**

In The No. 2 We Are Offering You a quart-size torch, having every **improvement that improves.** The tank is drawn out of heavy brass, free from seams, and all fittings are heavy. Reinforcements are used to make an extra strong tank. A brass air pump of the latest design screws into the tank and is submerged in gasoline, which aids in keeping it cool, and also protects it from injury. The burner used is a strong generator, producing a clear, blue, blast flame, using very little gasoline. In fact, **the user will soon save the cost of the Torch in the saving of gasoline alone;** with it he can do any work that can be done with any round-burner torch. The No. 2 is light, well balanced, easily handled, and is sure to please. A careful inspection will convince you that only the best of workmanship and materials have been used. **Remember our name on a Fire Pot or Torch** means your money back if you are not pleased.

$2.50 net.

CLAYTON & LAMBERT MFG. CO.,
Detroit, Mich., U. S. A.

Just a Little Higher

in price, but so much

HIGHER IN QUALITY

that the great majority of dealers prefer to sell

Caldwell Sash Balances

They can recommend them with clear conscience. Write for catalog.

Caldwell Mfg. Co.

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J. R. West, Gas City, Ind., writes: "Please discontinue ad. for Tiuner, as I am overwhelmed with applicants, and have had a man at work some time."

Old Dominion Horse Shoes.

Illustrated Catalogue and Prices on Application.

Old Dominion Iron & Nail Works,

RICHMOND, VA., U. S. A.

ARTHUR B. CLARKE, President.

Patented.

Standing Seam and Slate Roof (Patented) Snow Shoe Irons

No snow rails need be used unless desired. The lugs clinch through the seam easily but securely. Send for catalogue.

BERGER BROS. CO. MFRS. OF TINNERS' HARDWARE AND ROOFERS' SUPPLIES PHILADELPHIA. U. S. A.

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BUILDING,
WRAPPING,
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NEWS,
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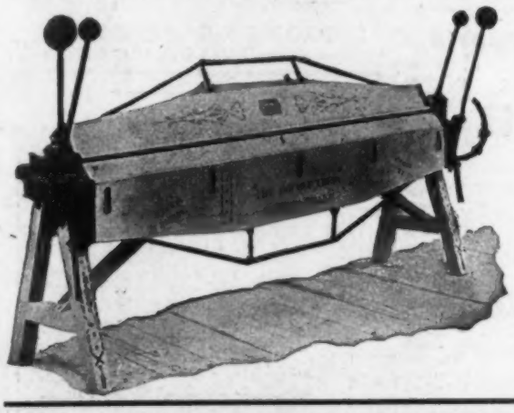
Send for Catalogue.

The "New Improved" Double Truss Cornice Brake



Our brake is operated on the same principle and does the same work, both in quality and quantity, as ordinary Iron Brakes.

We guarantee them to bend No. 22 gauge iron, or lighter, easily, straight and true.

Write for prices.

J. L. Perkins & Co.

Western Agents,

241 Lake St., - - CHICAGO.

L. L. Dana, Neponset, Ill., Writes:

"Please take my advertisement out of your paper for set of tinner's tools.
Have had plenty of answers and have secured a set."

L. B. HOOKER, Sturgis, Mich., writes:

"Your paper is a grand success. I believe no tinner or plumber should do without it. I try to keep up with the times and the only way is to find out what other shops are doing, and the way to do that is to take The American Artisan."

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You Want
The Latest Designs,
and
Best Fitting
METAL CEILINGS
On The Market,
We Make Them.
Also
Cornice, Skylights,
Eaves Trough, Conductor Pipe.
J. H. ELLER & CO.,
Canton, Ohio.

Hardware Dealers
Can Handle
Northrop's
Stamped
Steel Ceilings

and do well for their customers and themselves. Send for catalogue—give diagram and description of room for an estimate and we will no the rest.

H. S. Northrop, 53 Cherry St., NEW YORK.

Genuine Russia
Sheet Iron.
28 x 56 inches.
Perfect Nos. 7 to 12 inclusive.
No. 1 Stained, Nos. 7 to 10
No. 2 " " 8 to 12
No. 4 " " 8, 11, 12
SEND US YOUR ORDERS OR INQUIRIES
FOR IMMEDIATE SHIPMENT.
Bruce & Cook,
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Sheet Metal Ornaments
Steel Ceilings and Hose Pliers
WE MAKE THE FINEST CRYSTALLIZED
STOVE BOARDS
ON THE MARKET.
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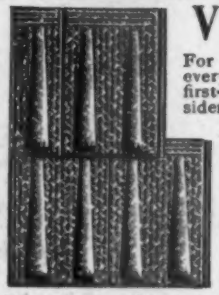
Grand Rapids, Mich.

The Powers
Automatic
Chimney Top
IS BEST ON EARTH.
Is only one with brace adjusting and holding cover. Is most perfectly and scientifically made. Is more used than all others combined. Sold by Leading Hardware Jobbers and Dealers. Made only by
POWERS BROS.,
STREATER, ILL.
Write for Prices, Etc.
Irons only or Complete.



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For public buildings of every character where first-class roofing is a consideration, our galvanized
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Deeply embossed.
Presents attractive appearance.
Telescope Side Lock.
Catalogue fully describes them.
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The "Centennial"
Rain-Water Cut-Off.

The strongest, most durable and cheapest CUT-OFF on the market.
The only single Cut-off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.
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Manufactured only by
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Is intended Exclusively for the legitimate Hardware trade, and no Hardware man will find it difficult to compete in price and win the trade of every economical buyer if he has one.
It contains a bargain list of merchandise bought by us at
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and hundreds of bargains in an extensive line of Steel Roofing, Plumbing Material, Machines, Builders' Hardware, etc.
Write for it Today.
Chicago House Wrecking Co.
West 35th and Iron Sts., CHICAGO

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Conductor Pipe, Eaves Trough and Gutters can not be too good. We make them, and the styles, material and workmanship are all that can be desired.

Ever handle our Metal Ceiling and Side Walls? We manufacture Sheet Metal Goods of every description.

Write for catalogue of designs and prices.

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Send your orders to us. We have a large stock and guarantee prompt shipments.
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The Perfection Rain-Water Cut-Off.
EXCELS ALL OTHERS IN SIMPLICITY—STRENGTH—DURABILITY.
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SOLE MANUFACTURERS,
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Attracts the same admiration as purity in anything else. Our Solders are sold at their exact value—no misrepresentation. Value in Solder is better estimated in actual results than in dollars and cents.

Our brands are: Extra Fine. Warranted ½ and ½. Camaret Tinsmiths and Double Refined.

Accuracy in proportions.

Plumbers' Extra Wiping. Triangular bar or drop capping bars.

Our Guarantee to be exactly as represented goes with every bar.

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MERCHANT & CO., Inc.,

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Plain Talks About Metal Ceilings.

Selecting The Designs.

The design that looks best in a room largely depends upon the room itself and what it is used for.

Thus, certain styles are more suitable for churches than others; certain ones for hospitals; certain ones for school, for office, for home, for stores, restaurants, and so on through the list.

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Heavy girder work, deep panels or bold, massive ornamentation don't look right in small rooms—they belittle the room.

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The point is to preserve the proper balance between room and ceiling, so that neither one will detract from the other.

This result is easily obtained with

"BERGER'S Classik" METAL CEILINGS

The variety of artistic styles we offer permits you to choose something suitable for the kind of room the ceiling is to be used in.
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Thus we meet both horns of the dilemma and give the purchaser ample chance for making the right selection.
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The Berger Mfg. Co. CANTON, OHIO.

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YOUNG AMERICA SCALE.
BEST IN THE WORLD.

It is made of Steel.
White Tile Top.
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A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20-pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

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Tools for Sheet Metals

Tinsmiths' Roofers' Cornice Makers' } TOOLS
SHEARS, PRESSES and DIES, PUNCHES, ROLLS
Made by
Niagara Machine and Tool Works
BUFFALO, N. Y.
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On First and Third Tuesdays in each month to
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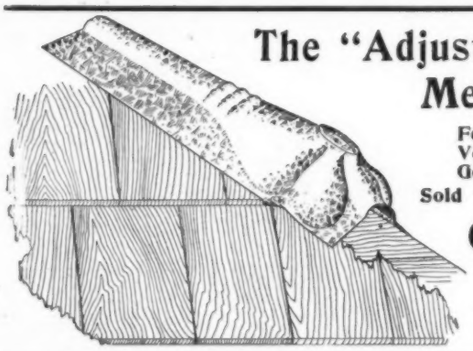
Via NORFOLK & WESTERN RAILWAY.
For all information as to RATES and TICKETS and for LAND PAMPHLETS and descriptive matter address ALLEN HULL, D. P. Agt., Columbus, Ohio.



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For Shingle or Slate Roofs.
Very Ornamental.
Good Sellers.
Sold to Dealers Only. Mfd. by
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Improved, Quick and Easy Rising Steam and Hand Power.
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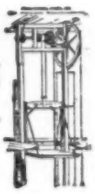

Crying to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.

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Steel, Metallic, Linen, etc. Our Goods are Recognized as the Best. Tinners' Rules, Magic Pattern Rules, etc. Send for Catalogue and Mention The American Artisan.

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Send us your orders for

COKE PLATES
CHARCOAL BRIGHT PLATES
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ROOFING AND SIDING

We have a large stock and can make immediate shipment.

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If a tinner loses a job to the slater he naturally feels badly about it, and when he finds out that he could just as well have had the order he feels five times as bad—Cortright Metal slates.
Cortright Metal Roofing Co., 30 N. 23rd St., Phila.

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McClure's Genuine Charcoal Iron Redipped Roofing Tin.

McCLURE & CO.,
Manufacturers of Tin Plate,

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Fire Arms are Standard

They are the Most Profitable Line to Handle.
Ready Sellers and Always Give Satisfaction.

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Registers At old list and discount.

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